



Manchester-Boston Regional Airport
One Airport Road, Suite-300
Manchester, New Hampshire 03103

Addendum No. Four

Date: August 22, 2022

RFP No: FY23-805-07 Full Service Fixed Base Operator

This Addendum # 4 to the Request for Proposals for Full Service Fixed Base Operator (“RFP”) contains the following clarifications, changes, additions, and/or deletions of the RFP:

- Responses to questions submitted in writing
- Attached Facility Condition Assessment Report Executive Summary
- Attached Stormwater Pollution Prevention Plan
- Attached Spill Prevention Control and Countermeasure Plan

QUESTIONS SUBMITTED IN WRITING

Question 1: Was the attendance at the pre-proposal meeting mandatory to participate in the RFP process?

Response: No.

Question 2: The minimum requirement of managing 5 or more FBO of the size and scale of MHT reduces the proposer pool to a handful of large chains. It precludes many qualified proposers. Would the airport consider relaxing this requirement?

Response: The minimum requirements under the RFP will not be waived.

Question 3: Can we get a copy of the AECOM report on Ammon Center to better understand the building condition?

Response: Yes. Attached to this Addendum #4 is the Executive Summary of the Facility Condition Assessment Report.

Question 4: When does Signature’s lease expire? (It is relevant to understand if the proposer offered higher gross receipts than Signature to the airport, how long will the competitive disadvantage last.)?

Response: May 31, 2039.

Question 5: Is Signature allowed to bid on the second FBO?

Response: Yes.

Question 6: Since the current lease agreement with Signature provides for a “future FBO or into-plane fueler” access to these tanks, would the airport consider a concession to the minimum standard requiring new fuel tanks (20K Jet A, 10K Avgas)?

Response: The Minimum Standards require that each FBO have, “Permanent fuel storage for a minimum of 20,000 gallons for jet fuel and 10,000 gallons for aviation gasoline” as a part of the FBO’s minimum investment in the construction of improvements and facilities.

Question 7: Section 1.2.1(c) of the RFP mentions a waitlist for hangar space. Can we get an idea of the size of the waitlist in either square feet or by type of aircraft – piston, turboprop, turbojet, rotor? Please provide the waitlist for single-engine, multi-engine aircraft and corporate jet aircraft.

Response: The current wait list for hangar space consists of thirteen potential tenants. The Airport has not entered into lease discussions with these parties so their specific requirements may vary.

Question 8: What are the prevailing hangar rents per sq ft?

Response: Tenants of the Airport’s hangars currently pay an annual rent of \$3.12 per square foot.

Question 9: We understand the final scoring will include points from the Phase II interviews. How many points are allocated to the interview?

Response: The criteria used to score the Phase II interviews will be included in the notification of the shortlist issued to the shortlisted Respondent.

Question 10: Is Signature Flight Support charging customers additional flow fees above and beyond what the Airport requires?

Response: Signature provides the Airport with the fuel flowage fees listed in Section 1.6.2 of the RFP.

Question 11: What does the other FBO currently pay for ground rent?

Response: Ground rent for tenants is based on fair market value and appraisals. The ground rent at a location other than the premises described in the RFP is not applicable to this procurement action.

Question 12: Please provide slides presented by Ted Kitchens at the Pre-Proposal Meeting on 8/8/22.

Response: The Pre-Proposal presentation is now available on the procurement website.

Question 13: Please provide the City's approved Stormwater Pollution Prevention Plan and Spill Prevention & Countermeasures Control Plan.

Response: The Stormwater Pollution Prevention Plan and the Spill Prevention Control and Countermeasure Plan are both attached to this Addendum #4.

Question 14: Are there any areas of exclusive use at the fuel farm?

Response: The Ground Support Equipment (GSE) shop located adjacent to the fuel farm is owned and operated by Signature. The two existing fuel tanks are also owned and operated by Signature, however the fuel pad and retention area are available for use by others per the RFP.

Question 15: What is the fuel storage fee per gallon for storage currently leased by Signature Flight Support?

Response: Per Section 1.2.9 of the RFP, at this time the Airport does not have an established storage cost per gallon, as the Airport has never had a second FBO or intoplane fueler on the field.

Question 16: Are there flow fees for commercial airlines?

Response: The Airport does not require the current FBO to charge a fuel fee for Part 121 commercial airlines.

Question 17: Please provide As-Built drawings of the fuel farms. If plans are not available, please answer the following: (1) Location of site electrical; (2) Presence and location of an Oil Water Separator; (3) Can we connect into the current fuel farm system and use loading and unloading? If not, where is the best place to install loading and unloading?; (4) Is a tie-into the existing pump systems an option?

Response: Drawing, if available, and the requested information regarding the fuel farm, will be addressed with the successful Respondent.

Question 18: Are there size restrictions (capacity or height) for storage tanks?

Response: The location, capacity, height, and other related matters regarding fuel storage tanks shall be discussed and determined in coordination between the successful Respondent and the Airport, and subject to FAA rules and regulations.

Question 19: Is there any issue with horizontal storage tanks versus vertical storage tanks?

Response: See answer to Question 18 herein.

Question 20: Please provide “Required DBE forms.”

Response: There are no required DBE forms for this RFP. That language was included in error.

Question 21: Has the City determined the number of FBO operations it is willing to accept at the Airport?

Response: Per Section 1.1 of the RFP, the Airport will select one (1) qualified Respondent to construct and operate an FBO under this procurement action. Per Section 1.6.6, the Airport reserves the right to seek similar or identical services elsewhere if deemed in the best interest of the Airport. The number of FBO operators will be ultimately determined by demand for general aviation/flight services.

Question 22: Regarding the note on solar panels for the site at Sec. 2.1.5 (d), what guidance can the Airport provide with respect to the permissible size, location and orientation of rooftop solar panels that may be planned for new construction on the site?

Response: A form 7460-1 “Notice of Proposed Construction or Alteration” will have to be filed with the FAA. Additional guidance can be obtained from the FAA’s Solar Glare Analysis, which can be found at [FAA.gov](https://www.faa.gov).

Question 23: Please identify all known environmental hazards and other environmental/hazardous materials issues that exist on the site or that may impact the site or any structure, construction, demolition or activities at the site, including above, at and below the surface, and with respect to the Ammon Center and fuel farm facility.

Response: A Facility Condition Assessment was conducted for the Ammon Center. The Executive Summary of this assessment is included as part of this addendum.

Question 24: Are there any restrictions with respect to geothermal systems at the site? If so, what are they?

Response: Geothermal systems have not been previously contemplated for the site. The successful Respondent may investigate accordingly as part of their due diligence.

Question 25: Please identify any future construction work planned for the taxiways and runways adjacent to the site, and whether they may impact construction or use of the site in any way.

Response: Runway 17-35 will be closed for rehabilitation for a period during the 2023 construction season. Access to the site will remain available throughout the project.

Question 26: Under what terms and conditions could a new FBO utilize the available space at the fuel farm containment area to construct and operate its own fuel tanks at that location?

Response: Any terms and conditions regarding construction and operations at the fuel farm will need to be negotiated with the current tenant as a sublessor.

Question 27: What is the condition of the apron and ramp at the site? Are there any use restrictions (i.e., weight limits) with respect to these areas? Are there requirements with respect to repair or replacement that a new FBO/tenant would have to undertake?

Response: The existing Ammon Center ramp is intended for use by general aviation aircraft. The general condition of the site is included in Appendix F to the RFP.

Question 28: What is the airport planning to contribute to the ramp repairs and replacement?

Response: Negotiable with successful respondent.

Question 29: Does the Airport have an exclusivity, right of first refusal, right of first offer, or other similar arrangement with any entity with respect to any of the FBO services contemplated by the RFP, including without limitation the delivery, storage, purchase, sale or distribution of aviation fuel?

Response: No. The Airport is prohibited by FAA regulations from providing such agreements.

Question 30: Has the Airport conducted geotechnical sampling at the apron, ramp and site? If so, please provide the published findings.

Response: No. Geotechnical analysis will be the responsibility of the successful Respondent.

ATTACHMENT I

Facility Condition Assessment Report Executive Summary

AECOM

FACILITY CONDITION ASSESSMENT REPORT



The Ammon Center at Manchester Airport |

Project Location:

The Ammon Center at MHT
175 Ammon Center Road
Manchester, New Hampshire 03103

Prepared for:

Manchester-Boston Regional Airport (MHT)
One Airport Road, Suite 300
Manchester, NH 03103

Prepared by:

AECOM
Building Evaluation & Consulting Practice
1700 Market St, 16th Floor,
Philadelphia, Pennsylvania 19103
AECOM Job No. 60638480

Executive Summary

Introduction

At the request of the Manchester-Boston Regional Airport Department of Aviation (DOA, Client), AECOM conducted a facility condition assessment (FCA) of the Ammon Center at Manchester Airport (formerly the Ammon Terminal). Our study was two-fold – first, AECOM was tasked with evaluating the existing structure, its condition and its general compliance with current governing codes; second, AECOM was asked to evaluate several options for the future use of the building. AECOM understands that the client would like to make better use of the building. AECOM's general approach to the project involves returning the building to a state of good repair with options for additional modernization of the facility to make it more attractive to prospective tenants.

AECOM conducted a visit to the existing facility located at 175 Ammon Road in Manchester, New Hampshire on Tuesday January 25, 2022 and Wednesday January 26, 2022. The site was developed with a partial two-story office building. The north and south wings of the building were generally single story. The building was originally constructed as the main terminal for Manchester Airport in 1961. Major additions were added in 1984 and 1991. Dates of construction are shown in **Appendix A**. At an undetermined time, the Ammon Terminal was converted into office space following the opening of a new passenger terminal in 1994. The office building was named the Ammon Center at Manchester Airport. **Note:** When the building was converted to office space, the former control tower was removed from the structure.

The estimated gross floor area for the building was 42,359 square feet. The rentable area was reportedly 31,038. This includes 20,207 rentable square feet of space on the 1st Floor and 10,831 rentable square feet on the 2nd Floor level. An additional 2,437 square feet of usable maintenance and storage space was provided at the Basement. In addition to office space, the 1st Floor level included some high-bay warehouse / loading areas, a large conferencing room and spaces still fit out for airport uses. The 2nd Floor space was all office. Floor plans for the building are provided in **Appendix A**.

At the time of the assessment, the building was occupied by various tenants on each floor. There were also vacant spaces throughout the building including Suite 101 and the suites on the south end at the 1st Floor and numerous suites on the 2nd Floor. A full listing of the building occupancy is provided in the table below:

Building Occupancy at the Time of Assessment ^{1,2}			
Suite	Tenant	Occupied Area, SF	Occupancy
101	<i>Vacant</i>	2,029	6.5%
102	<i>Vacant</i>	6,477	20.9%
103/104	National Flight Simulator, LLC	3,924	12.6%
106	Inland Technologies International, Ltd (Quantem)	7,777	25.1%
200	<i>Vacant</i>	90	0.3%
201/202	National Flight Simulator, LLC	896	2.9%

Building Occupancy at the Time of Assessment ^{1,2}

Suite	Tenant	Occupied Area, SF	Occupancy
203	<i>Vacant</i>	424	1.4%
204	<i>Vacant</i>	185 ²	0.6%
205	Health Market Connect, LLC	372	1.2%
206	<i>Vacant</i>	1,108	3.6%
207	Starscendant Corp.	446	1.4%
208	<i>Vacant</i>	1,567	5.0%
211	<i>Vacant</i>	1,859	6.0%
211A	Inland Technologies International, Ltd (Quantem)	991	3.2%
212	<i>Vacant</i>	634	2.0%
213	<i>Vacant</i>	369	1.2%
214	<i>Vacant</i>	203	0.7%
215	<i>Vacant</i>	213	0.7%
216	<i>Vacant</i>	292	0.9%
217	Ammon Technology Services, LLC	549	1.8%
218	John Romanowski & Assoc., Inc.	505	1.6%
219	<i>Vacant</i>	128	0.4%

Notes:

1. Floor areas typically taken from rent roll provided by Client.
2. Floor area shown was taken from a BOMA worksheet provided by the Client.

Scope of Work

The scope of work involved a facility condition assessment of the subject facility and was performed in an effort to provide information about the current condition of the various building systems and assets. Additionally, AECOM was tasked with evaluating the presence of potential hazardous materials. The overall result of the facility condition assessment and hazardous materials survey was to establish feasible options for returning the facility to a state of good repair along with the associated costs of such.

The focus of this report is to detail the process and results of the Condition Assessment scopes of work for the project. AECOM's goals for the project were:

1. Create a detailed "inventory of assets" – Defined as a register of capital assets and information about those assets.
2. Develop a condition assessment of inventoried assets – Defined as ratings of the assets' physical states; should be at a level of detail sufficient to monitor and predict performance of inventoried assets
3. Observed and selectively sample potential hazardous materials at the facility.
4. Establish several feasible options for future renovation of the facility along with the associated costs.

In order to achieve the goals established for this project, AECOM deployed a qualified field team to the site for two (2) days. Prior to deployment, AECOM developed a digital application for data collection and assessment and trained our field staff.

Data was collected using a standard Unifomat II hierarchy. The following systems were assessed as part of the site reconnaissance for the project:

- Exterior Site Elements
- Building Structure Systems
- Building Exterior Systems
- Roof Systems
- Life and Fire Safety Systems
- Mechanical Systems
- Electrical Systems
- Plumbing Systems
- Building Interior Systems
- Conveyance Systems

The assessments included the following: a site reconnaissance; limited interviews with airport staff and on-site personnel; and a review of available documents as provided by the DOA, which was responsible for the property. Operational testing of building systems or components was not conducted. The hazardous materials survey did not cover all materials on the property; however, sampling was performed based on experience and information provided to the AECOM team.

The recommendations within this report focus on the scopes of work required to return the building to a State of Good Repair and to retrofit the building design to be more consistent with the current building codes. As part of the effort, issues such as structural deficiencies, heating, cooling and ventilation deficiencies, emergency egress requirements and conformance with the Americans with Disabilities Act (ADA) have been considered.

Hazardous Materials Survey

AECOM conducted a hazardous materials survey which identified and sampled for a number of environmental and health and safety hazards at the building. The key elements surveyed were asbestos containing materials, lead based paints, polychlorinated biphenyls and mold.

A total of one hundred and twenty-eight (128) asbestos samples were collected. Asbestos was detected in the white joint compound on walls (2% Chrysotile, 384 LF), and the yellow carpet mastic under the blue carpet in the 2nd Floor South Wing (3% Chrysotile, 4,500 SF)

A total of four (4) suspect lead-based paint (LBP) chip samples were collected. None of the four (4) paint samples collected contained lead levels above the HUD threshold; three (3) of the four (4) samples were above the lower detection limit, but still below the HUD levels in paint.

The results of the PCB analyses indicated that none of the PCB samples exceeded the PCB BPW limit; therefore, no action is required.

AECOM collected two (2) surface tape lift samples of suspect fungal growth. High concentrations of *Stachybotrys* / *Memnoniella* were identified on the gypsum board wall in the 2nd Floor Lobby Office and on the dropped ceiling tile in the 1st Floor Suite 102 Room 22. In addition, high concentrations of *Acremonium* were identified on the dropped ceiling tile in the 1st Floor Suite 102 Room 22.

Conclusion

In general, the Ammon Center at MHT was in fair overall condition. The building has been maintained over the years, but significant capital investments have not been dedicated. The occupied areas were in better condition than vacant spaces. Overall, the building design features and finishes were dated, and modernization should be considered with future capital projects. Some areas of the building were designed to serve as airport terminal space and should be fully overhauled to permit an office usage. Modernization and re-configuration of the spaces should lead to the facility being more desirable to future tenants and increase potential leasing rates.

AECOM evaluated three (3) options for this reporting – Option A, Option B and Option C. In general, Option A deals only with Deferred Maintenance projects (“fix what is broken”); Option B considers all building projects for the next 5 years (including Deferred Maintenance); Option C looks at a full renovation and modernization of the building.

While Option A represents the lowest costs, it also provides the least return on investment as the facility will still have future investments required and the building will still be less than fully utilized. Option C represents the most comprehensive and expensive scope of work. Option B is a middle ground between the two (2) other options. Option B does account for future investments but for a limited timeframe and with diminishing returns on investments as other systems need future capital projects.

AECOM's general recommendation is the Option C is the most desirable. This option brings the facility into a modern standard, deals with occupational hazards at the building and allows for the building to be fully leased and utilized. AECOM would also assume increased leasing rates. Lastly, while the upfront costs for Option C are higher, the longer-term capital investments are minimized and returns on investments are greater due to the higher rents and more efficient systems.

ATTACHMENT II

Attached Stormwater Pollution Prevention Plan

Stormwater Pollution Prevention Plan Manchester-Boston Regional Airport

USEPA Permit Tracking Number NHR053247

Prepared For

Manchester-Boston Regional
Airport One Airport Road
Manchester, New Hampshire 03101

SWPPP Contact(s):

Thomas J. Malafronte, A.A.E.
(603) 624-6539
tmalafronte@flymanchester.com

Luis Elguezabal, A.A.E.
(603) 624-6539
lelguezabal@flymanchester.com

Prepared By

Normandeau Associates, Inc.
25 Nashua Rd.
Bedford, New Hampshire 03110
603-472-5191
www.normandeau.com

www.normandeau.com



October 18, 2021

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Acronyms and Abbreviations

AST	Above Ground Storage Tanks
ADF	Aircraft deicing fluids
ARFF	Aircraft Rescue and Fire Fighting
BMP	Best Management Practices
EPA	Environmental Protection Agency
FBO	Fixed Base Operator
MSGP	Multi-Sector General Permit
NHDES	New Hampshire Department of Environmental Services
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
SIC	Standard Industrial Classification
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UPS	United Parcel Service
UST	Underground Storage Tanks

Introduction

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for Manchester-Boston Regional Airport (hereinafter, the Airport or MHT) in accordance with the requirements of the United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II Program and the 2021 Multi-Sector General Permit (referred to hereafter as MSGP). The EPA NPDES Phase II Program requires certain industrial facilities, including air transportation facilities, conform to the requirements of the MSGP to minimize pollution of stormwater entering water bodies of the United States. The MSGP for industrial activities requires that a Notice of Intent (NOI) form be filed with the USEPA for a facility to obtain coverage under the MSGP and indicates that the permittee will conform to the MSGP requirements including all conditions and schedules, as amended. The MSGP also requires that a SWPPP be prepared for the facility prior to filing the NOI. The SWPPP must:

- Designate a storm water pollution prevention team (Part 6.2.1 of the permit);
- Provide a site description (Part 6.2.2);
- List a summary of potential pollutant sources (Part 6.2.3)
- Prepare a description of pollution/runoff control measures (Part 6.2.4);
- Provide a listing of schedules and procedures (Part 6.2.5);
- Provide documentation to support eligibility considerations under other federal laws (Part 6.2.6); and
- Provide certifying signature of the facility owner or designated official (Part 6.2.7).

Once the SWPPP has been prepared for the facility, the facility may file the NOI to indicate the eligibility requirements for the MSGP have been met and the facility must conform to the substantive requirements of the permit for stormwater discharges. A copy of the NOI is contained in Appendix A to this SWPPP and a copy of the 2021 MSGP can be accessed from the EPA website (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp>). The NOI covers the discharges for the duration of the MSGP which will expire at 11:59 pm eastern time, February 28, 2026.

In September 1995, the USEPA, under its authority to administer the NPDES program granted by the Clean Water Act of 1972, issued the 1995 Multi-Sector General Permit for Industrial Activities to regulate stormwater and non-stormwater discharges associated with certain industrial activities. The Airport is subject to the EPA stormwater regulations and the NPDES permit program and is therefore required to obtain coverage under the MSGP for Industrial Activities. NPDES general permits (which cover a group of dischargers with similar qualities in a given location) are effective for a five year period and are typically succeeded by revised permits that incorporate programmatic changes to address stormwater pollution. The 1995 MSGP was succeeded by the 2000 MSGP for Industrial Stormwater Activities that was issued on October 30, 2000 and expired on October 30, 2005. The 2001 permit was administratively extended for several years until a successor permit could be authorized. A Draft 2006 MSGP was prepared in December 2005 and following revisions a Final 2008 MSGP for Industrial

Activities was issued on September 29, 2008. The 2008 permit expired September 29, 2013 and was administratively continued until the 2015 MSGP successor permit was authorized and became effective on June 4, 2015 and expired on June 4, 2020. The most recent 2021 MSGP became effective on March 1, 2021 and this SWPPP has been prepared in conformance with the requirements of that permit including all conditions and schedules, as amended.

This SWPPP provides information that is specifically required by the EPA to obtain NPDES coverage for stormwater and non-stormwater discharges under the MSGP. Section 1.0 provides a facility description and contact information. Section 2.0 discusses potential pollutant sources. Section 3.0 details stormwater control measures. Section 4.0 describes permit activity schedules and procedures. Section 5.0 provides documentation to support eligibility considerations under federal law. Section 6.0 discusses corrective action requirements. Section 7.0 provides SWPPP Certification by the Airport responsible parties. Section 8.0 contains procedures for future SWPPP modification.

All Airport tenants that are subject to the requirements of the 2021 MSGP by virtue of their Standard Industrial Classification (SIC) code must prepare and submit a Notice of Intent (NOI) to obtain coverage under the permit. Tenants at the Airport must also prepare a SWPPP and coordinate the elements of the SWPPP with the Airport. All tenants are also required to prepare and submit an annual report to EPA (see Section 4.8 of this SWPPP for additional information). The Airport is allowed to perform certain activities on behalf of itself and its tenants to increase efficiency and eliminate redundancy and duplication of effort per Part 8.S.3.2 of the MSGP. Activities completed by the Airport on behalf of itself and its tenants include Indicator Monitoring (5.7.1), Quarterly Visual Monitoring (5.6.2), Benchmark Monitoring (5.7.1), and Impaired Waters Monitoring (5.7.4). These activities are communicated to the tenants as discussed in Section 5.8.

1 Facility Description and Contact Information

1.1 Facility Information

Name of Facility:	Manchester-Boston Regional Airport
Street:	One Airport Road
City, State Zip:	Manchester, NH 03103
County:	Hillsborough/Rockingham
NPDES ID:	NHR053247
Primary Industrial Activity SIC Code:	4581
Sector: S Subsector:	S-1
Co-located Industrial Activity SIC Code	Table 1–1
Latitude:	42.9286°N
Longitude:	71.4367°W
Method of determining latitude/longitude:	Google Earth™
Is the facility located in Indian country?	No
Is the facility considered a "federal operator" facility?	No
Estimated area of industrial activity exposed to stormwater:	490 Acres
Does the facility discharge stormwater into a municipal separate storm sewer system?	Yes
Names(s) of surface water(s) that receive stormwater from the facility:	<ul style="list-style-type: none"> • Merrimack River • Cohas Brook • Little Cohas Brook • South Perimeter Brook • Pine Island Pond
Does the facility discharge industrial stormwater directly into any segment off an "impaired water"?	Yes
If Yes, identify name of the impaired waters, segment, and pollutants causing impairments:	Table 1–2
Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes list the TMDL pollutants:	Yes. All waterbodies - Mercury (TMDL ID 33883), Pine Island Pond - Dissolved Oxygen, Chlorophyll-a, Cyanobacteria (TMDL ID 40294), and Merrimack River - E. coli (TMDL ID 39274)

Does the facility discharge industrial stormwater into a receiving water designated as Tier 2, Tier 2.5, or Tier 3 water?	No
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Table 1–1. Co-Located Facilities

Facility Name	MSGP Sector/Subsector	SIC Code
FedEx	S/SI	4512
United Parcel Service (UPS)	S/SI	4512
American Airlines	S/SI	4512
Southwest Airlines	S/SI	4512
Spirit Airlines	S/SI	4512
United Airlines	S/SI	4512
Signature Flight Services	S/SI	4581
Wiggins Airways	S/SI	4512
Freudenberg NOK	Y/Y1	3053

Table 1–2. Impaired Surface Waters

Surface Water Name	Segment ¹	Impairment
Cohas Brook	NHRIV700060703-08	<ul style="list-style-type: none"> • pH² • Mercury
Little Cohas Brook	NHRIV700060804-05	<ul style="list-style-type: none"> • Benthic Macro-invertebrate Bioassessment • Taste & Odor • Foam, Flocs, Scum, Oil Slicks • Chloride² • Dissolved Oxygen² • Iron² • pH² • Mercury
South Perimeter Brook	NHRIV700060804-12	<ul style="list-style-type: none"> • Chloride² • Iron² • Mercury
Pine Island Pond	NHLAK700060703-04	<ul style="list-style-type: none"> • Dissolved Oxygen² • Chlorophyll-a • Cyanobacteria • pH² • Mercury
Merrimack River	NHRIV700060804-11	<ul style="list-style-type: none"> • Escherichia coli • Mercury

¹ N.H. Department of Environmental Services Assessment Unit

² Requires Impaired Waters Sampling

1.2 Contact Information/Responsible Parties

Facility Operator(s)

Name:	City of Manchester, Department of Aviation Manchester-Boston Regional Airport
Address:	One Airport Road
Telephone Number:	(603) 624-6539
Email address:	www.flymanchester.com

Facility Owner:

Name:	City of Manchester, NH
Address:	One Airport Road
Telephone Number:	(603) 624-6539
Email address:	www.flymanchester.com

SWPPP Contacts(s):

SWPPP Contact Name (Primary):	Thomas J. Malafronte, A.A.E.
Telephone Number:	(603) 624-6539 x 308
Email address:	tmalafronte@flymanchester.com
SWPPP Contact Name (Back-up):	Luis Elguezabal, A.A.E.
Telephone Number:	(603) 624-6539 x 306
Email address:	lelguezabal@flymanchester.com

1.3 Stormwater Pollution Prevention Team

For the Manchester-Boston Regional Airport, the SWPPP Team that will be responsible for preparing, implementing, and sustaining the SWPPP is comprised of the following personnel:

- Deputy Airport Director:** The Deputy Airport Director is the Airport's MSGP Team Leader. His responsibilities include overall responsibility for confirming that daily operations at the Airport comply with the requirements of the SWPPP. The Team Leader confirms that periodic inspections of Airport activities are performed. The Team Leader notes recommendations for improving the SWPPP and coordinates with co-permittees and other tenants to verify that their activities are in compliance with the SWPPP's requirements. The Team Leader supervises any emergency response activities for an event that could lead to storm water contamination and confirms that annual training is provided for Airport and tenant personnel designated to implement this SWPPP. The Team Leader also maintains a record of revisions to the SWPPP, which is filed in the Team Leader's office.
- Airport Director:** The Airport Director has overall responsibility to confirm that the recommendations of the SWPPP are implemented, and that the SWPPP is periodically

updated. The Director programs the resources needed to eliminate or adequately manage potential pollutant sources. The Airport Director is also responsible for confirming that tenants understand the requirements of the SWPPP and dedicate the necessary resources for compliance.

- **Assistant Airport Director, Operations and Facilities:** The Assistant Airport Director, Operations and Facilities (AD-OF) is responsible for developing and publishing the SWPPP in accordance with regulatory requirements and sound engineering practices. The AD-OF assists with the implementation of the SWPPP and periodically updates the SWPPP as necessary;
- **Airport Fire Chief:** The Airport Fire Chief is responsible for responding to accidents or incidents at the Airport as the Incident Commander. The Aircraft Rescue and Fire Fighting (ARFF) Department, which is located on Airport property, provides crash and rescue services, and has the necessary equipment and training to respond to hazardous material spills. The Airport Fire Chief also maintains records of spills/leaks and response measures, as well as materials stored within buildings on Airport property;
- **Fixed Base Operator (FBO):** The Director of Operations for the Airport's FBO coordinates the FBO's SWPPP responsibilities with Airport officials. The Director of Operations for the FBO confirms that the FBO has identified and trained employees so that FBO activities comply with the requirements of the Airport's SWPPP. The Director of Operations for the FBO also provides information to Airport officials in the event that the FBO modifies operating procedures regulated by the MSGP.
- **Environmental Consultant:** The Airport's Environmental Consultant assists Airport staff in conducting monitoring, sampling, inspecting, reporting, documenting, and employee/tenant training tasks.

1.4 Site Description

Manchester-Boston Regional Airport (the Airport) straddles the City of Manchester and Town of Londonderry municipal boundary and is approximately 1 mile east of the Merrimack River (See Figure 1 in Appendix B). The Airport is a publicly owned commercial airport that provides commercial passenger, air cargo, corporate, and general aviation services. The Airport operates two runways: the primary runway 17/35 is an asphalt runway with dimensions of 9,250' × 150', and the crosswind runway 6/24 is an asphalt runway with dimensions of 7,650' × 150'. Other impervious surfaces include taxiways, ramps, and parking aprons.

Daily operational activities at the Airport include storage and fueling of aircraft and ground support equipment; aircraft landings and take-offs; maintenance of aircraft and ground support equipment; cleaning of vehicles and equipment; storage of deicing/anti-icing agents, fuel, lubricants, paints, solvents, etc.; airport administration; building and grounds maintenance; aircraft deicing/anti-icing; runway and taxiway deicing; cargo handling and transport; and various tenant activities. The Airport is currently rated as a small hub airport and commercial passenger service is provided by: American Airlines, Southwest Airlines, Spirit Airlines and United Airlines. Air cargo services are provided by FedEx, United Parcel Service (UPS), and Wiggins Airways.

The Airport's Fixed-Base Operator (FBO) is Signature Flight Support. Signature provides aviation-related services including: fuel and ramp servicing, deicing and anti-icing, passenger and crew services, and charter handling. Their facilities consist of a passenger terminal and four hangars totaling 87,000 sq. ft. capable of housing large cabin business aircraft. The facility operates its own fuel farm for Jet-A, AvGas, automotive fuel and diesel.

Approximately 1,500 acres in size, Airport property is generally flat, at an elevation of approximately 250 feet above mean sea level. Local soils are typically well drained, and storm water from the Airport drains west to the Merrimack River and South Perimeter Brook; north to Cohas Brook and Pine Island Pond; and south to Little Cohas Brook.

1.5 General Location Map

The General Location Map uses the U.S. Geological Surveys 7 1/2-Minute Manchester South Quadrangle Map, and is included in Appendix B.

1.6 Site Map

The attached Figure 2 (Appendix B) is a facility layout map based on a plan. The diagram shows locations of all activities, materials that might be exposed to stormwater, delineation of impervious surfaces, existing structural Best Management Practices (BMPs), surface water bodies, locations of spills that have occurred in the last three years, activities exposed to precipitation, and locations of stormwater conveyance. Figure 3 depicts the sub-drainage basins of the Airport and the stormwater outfalls to which they drain.

2 Potential Pollutant Sources

2.1 Potential Pollutants Associated with Industrial Activities

Potential pollutant sources are materials or industrial activities that may be exposed to storm water. A summary of activities that occur at the Airport, potential pollutant sources that may result from these activities and the potential for these pollutant sources to impact stormwater are discussed in the following sections.

Potential pollutant sources at the Airport include those potentially generated by airport staff and vendors, contractors, or consultants working for the Airport as well as those potentially generated by the FBO, the Airport's Aircraft Rescue and Fire Fighting (ARFF) equipment, airlines servicing the Airport, air cargo operators, and general aviation operations. Potential Airport-generated pollutants are herein discussed in detail. Potential tenant-generated pollutants are briefly discussed below. More detailed discussions can be found in SWPPPs prepared by those tenants who are subject to the requirements of the MSGP and are included as Appendix N. The following sections discuss the potential pollutant sources generated by airport operations.

2.1.1 Vehicle and Equipment Maintenance and Storage

The Airport maintains a large fleet of vehicles and associated equipment for its operations. Vehicles and equipment maintained by the Airport include: dump trucks, pavement sweepers, snow blowers, plows, front-end loaders, pick-up trucks, and SUVs. Maintenance on these vehicles is generally conducted inside the Operations/Maintenance Facility located at 400 Kelly

Avenue in the Northeast portion of the Airport. Airport vehicles are stored under cover in a storage facility next to the Operations/Maintenance Facility and the Maintenance Annex. Trench drains and floor drains located in the maintenance bays and Annex are connected to an oil/water separator prior to discharging to the municipal sanitary sewer system. Additional vehicle and equipment storage areas include a Hex Hangar and parking lot located in the southern portion of the Airport.

Potential Pollutants

Potential pollutants from vehicle and equipment maintenance and storage include residual motor oils, lubricants, greases, and coolants. The risk of stormwater becoming exposed to fluids or residual petroleum products from aircraft is low since most vehicles are stored under cover and maintenance is conducted indoors.

2.1.2 Vehicle and Equipment Fueling

Vehicle fueling activities occur at the Maintenance Building fuel farm, which consists of two 12,000-gallon diesel fuel underground storage tanks (USTs), one 12,000-gallon gasoline UST, and associated aboveground dispensing equipment. Fuel is transferred to vehicles from fuel dispensing equipment. Additional fuel transfer operations occur when the fuel farm tanks are refilled by tank trucks. The Airport maintains emergency generators at several locations including the terminal building and the airfield lighting vault. All fueling operations occur on paved areas.

Potential Pollutants

Minor spills of gasoline and/or diesel fuel could occur during fueling operations or during fuel transfer from fuel delivery vehicles. Such releases generally result from the operator's inattention or faulty equipment, such as frayed hoses or leaking nozzles. Such occurrences are rare and generally cleaned-up expeditiously.

2.1.3 Pavement Deicing Materials and Salt and Sand/Salt Storage

Pavement deicing occurs during winter storm conditions using potassium acetate for runways and taxiways, and sodium formate for airside access roads. The Airport stores potassium acetate in eight 10,000-gallon above ground storage tanks on a paved area just northeast of the Operations/Maintenance Facility. Two trucks used to spread the potassium acetate are stored nearby. One truck has a storage capacity of 2,000 gallons; the other has a storage capacity of 4,000 gallons. Sodium formate, in solid form is also applied to perimeter access roads.

No salt or sand/salt mixtures are applied inside the perimeter fencing, due to the corrosive nature of salt on aircraft.

Potential Pollutants

Potential pollutants from pavement deicing activities include runoff containing dissolved potassium acetate and sodium formate and spills or leaks from deicing compound containing vehicles or storage tanks.

2.1.4 Rubbish Storage

Rubbish and other solid waste is disposed of in covered solid waste containers and transported off site for proper disposal.

Potential Pollutants

Potential pollutants from rubbish storage include pieces of trash being carried out of the containers by wind or precipitation events and stormwater picking up residual fluids inside a trash container. The risk of stormwater becoming contaminated from rubbish, lubricants, paints, degreasers, etc. from uncovered dumpsters is low.

2.1.5 Building and Grounds Maintenance

Building and grounds maintenance includes clearing snow from walkways, mowing the grass, brush removal, sidewalk maintenance, runway maintenance, storm drain system maintenance, and maintenance of the electrical and mechanical systems of each building. No pesticides are used on the property.

Potential Pollutants

Potential pollutants from building and grounds maintenance include herbicides, organic matter from grass clippings, crack sealant, gasoline, and residual oils or greases from building and grounds maintenance equipment. The potential for stormwater to become impacted by building and grounds maintenance equipment is low due to the infrequent use of the materials during precipitation events. There is some potential for the exposure of gasoline to precipitation during the fueling of maintenance equipment, however, such releases would be small and any such releases would be cleaned up immediately.

Other potential sources of pollutants may be generated by activities conducted by airport tenants. These tenants include: the Airport FBO, commercial airlines, cargo carriers, and owner/operators of general aviation aircraft. Typical sources of pollutants are briefly discussed below and addressed in greater detail in tenant SWPPPs, as necessary.

2.1.6 Aircraft Maintenance

No major aircraft maintenance activities are conducted at the Airport. Several commercial airlines, cargo handlers, and general aviation operators contract with the FBO for scheduled services and repair work. The FBO conducts aircraft maintenance at their facility located at 1 Garside Way, which is owned by the FBO. Trench drains and floor drains located in the maintenance bays, as well as floor drains located in the offices and cafeteria, are connected to an oil/water separator prior to discharging to the municipal sanitary sewer system. Stormwater collected from the pavement around the FBO's Garside way facility passes through an oil/water separator prior to being discharged to Cohas Brook at Outfall #9.

Potential Pollutants

Potential pollutants from aircraft maintenance include petroleum products in the form of motor oils, lubricants, degreasers, used oils and fuels, and coolants. The likelihood that these would be exposed to storm water is low due to the fact that these products are stored and generally used inside. There is

a low potential that petroleum products could be released from the hangars and subsequently become exposed to stormwater if not properly contained and cleaned up after spills occur.

2.1.7 Aircraft Fueling and Storage

The FBO maintains and operates a fuel farm in the southern portion of the Airport at 1 Galaxy Way and additional fuel tanks at their 1 Garside Way facility on the eastern side of the Airport. All aircraft fueling at the Airport is conducted by the FBO with the exception of the DEKA facility which is privately owned and located in the northeast area of the Airport. Table 2-1 lists the FBO's tanks sizes, contents, and locations.

Table 2–1. FBO Registered Aboveground Fuel Tanks

Fuel Type	Tank Size (gallons)	Location
Lubricating Oil	300	1 Galaxy Way
Diesel Fuel	500	1 Galaxy Way
Diesel Fuel	12,000	1 Galaxy Way
Jet-A	271,462	1 Galaxy Way
Jet-A	271,462	1 Galaxy Way
Gasoline	12,000	1 Galaxy Way
Used Oil	350	1 Galaxy Way
100 Low Lead Avgas	10,000	1 Garisde Way
Jet-A	10,000	1 Garisde Way
Jet-A	12,000	1 Garisde Way
Diesel (generator)	250	1 Garisde Way

The FBO also maintains a fleet of mobile refueling trucks used to service both commercial and privately-owned aircraft. Table 2-2 lists the number of vehicles, their capacity, and the type of fuel they dispense.

Table 2–2. FBO-Owned and Operated Refueling Vehicles

Number and Storage Capacity of Vehicles	Fuel Dispensed
One 10,000-gallon	Jet-A
One 8,000-gallon	Jet-A
Four 5,000-gallon	Jet-A
One 3,000-gallon	Jet-A
Two 1,000-gallon	100 Low Lead Avgas
One 1,500-gallon/1,000-gallon	Diesel/Unleaded Gasoline

Potential Pollutants

Aircraft and equipment fuels are potential pollutants. The risk for the aviation fuel stored in aboveground storage tanks (ASTs) in buildings to become exposed to storm water is low. The AST's stored at the Galaxy Way fuel farm are enclosed in a bermed area designed to capture and

hold spills or other releases of fuel or are stored inside. The Garside Way ASTs are shop-fabricated double walled tanks or are stored inside. The FBO has prepared and maintains a Spill Prevention Control and Countermeasure (SPCC) Plan that is designed in part to ensure rapid and appropriate response to any accidental releases of potential pollutants from the fuel farm or the mobile refuelers. Additional information about FBO operations are contained in their site-specific SWPPP.

2.1.8 Aircraft Deicing

Aircraft deicing is conducted at the terminal gates, at the FedEx ramp, at the UPS ramp, and at the FBO's Garside Way facility ramp. Some ancillary deicing is also conducted at the end of Runway 35 during conditions when aircraft are delayed by storm conditions and exceed their holdover time. Southwest Airlines, FedEx, and UPS conduct their own aircraft deicing; the remainder of the aircraft deicing is conducted by the FBO. Copies of the Airport's annual glycol usage data are included in Appendix C. Additional data regarding aircraft deicing operations at the Airport can be found in SWPPPs prepared by the individual tenants who conduct deicing (Appendix N). The yearly volume of ADF used at the Airport during the term of the 2008 MSGP is listed in Table 2-3.

Table 2–3. Annual Propylene Glycol Usage (Gallons)

Deicing Season	Type I Propylene Glycol	Type IV Propylene Glycol	Total Propylene Glycol
2008-2009	105,567	10,338	115,905
2009-2010	89,660	7,740	97,400
2010-2011	86,332	9,538	95,870
2011-2012	65,027	6,230	71,257
2012-2013	105,827	13,847	119,674
2013-2014	99,429	12,193	111,622
2014-2015	89,170	12,127	101,297
2015-2016	76,692	7,190	84,602
2016-2017	91,601	10,798	102,400
2017-2018	85,381	11,156	96,537
2018-2019	72,780	9,250	82,030
2019-2020	85,244	10,941	96,185
2020-2021	100,372	11,023	111,395
Average Yearly Total	88,699	10,182	98,936

Potential Pollutants

Aircraft deicing fluids (ADF) used at the Airport include various brands and mixtures of Type I and Type IV propylene glycol. The quantity of propylene glycol ADF used at the Airport is a function of several variables: the type and intensity of the precipitation; the number, duration, and timing of the storms; the ambient air temperature; the size of the aircraft being deiced, and the number of aircraft operations. Most of the ADF used at the Airport is applied to commercial

aircraft at the terminal gates and at the FedEx and UPS ramps. Stormwater runoff from these areas is directed through oil/water separators into detention basin #12, and discharged into the Merrimack River through Outfall 19.

2.1.9 Aircraft, Equipment, and Vehicle Wash Water and Wastewater

Aircraft, equipment, and vehicle washing is not currently conducted or allowed outside of hangars/buildings at the Airport. Some equipment and vehicle washing is conducted inside the hangars and the Operations/Maintenance Facility and wash water is discharged to floor drains connected to the City of Manchester sanitary sewer system. Sanitary waste from commercial aircraft ("blue water") is discharged to the Manchester sanitary sewer system.

Potential Pollutants

The risk of contaminating stormwater from aircraft and ground service vehicle wash water is low, however, phosphorus (found in many soaps) can speed up eutrophication (a reduction in dissolved oxygen in water bodies caused by an increase of mineral and organic nutrients) of rivers and lakes. Grease and oil from vehicle washing can be picked up in wash water and transported to receiving waters. There is currently no risk of stormwater coming into contact with wash waters at the Airport because aircraft, equipment, and vehicle washing is not allowed outside of hangars/buildings at the Airport.

Table 2–4. Potential Pollutants

Industrial Activity	Associated Pollutants
Aircraft Fueling	Jet-A Aviation Fuel, Avgas
Ground Service Vehicle Fueling	Gasoline, Diesel Fuel
Emergency Generator Fueling	Diesel Fuel
Ground Service Vehicle Maintenance	Lubricants, Solvents, Anti-freeze, Paint, Batteries
Aircraft Maintenance (limited)	Lubricants, Batteries
Building and Grounds Maintenance	Herbicides, organic matter from grass clippings, crack sealant, and petroleum products.
Aircraft Deicing	Types I & IV Propylene Glycol
Pavement Deicing	Potassium Acetate, Sodium Formate
Sanitary Waste from Aircraft	"Blue Water"

2.2 Spills and Leaks

Potential locations of leaks/spills and the outfalls to which they could discharge are summarized in Table 2-5. Descriptions of leaks/spills that have occurred in the past three years and any future leaks/spills can be found in Appendix D of this SWPPP.

Table 2–5. Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls Potentially Affected
Airport Gates and Parking Aprons	19
Airport Tenant Parking Ramps and Aprons	9, 11, 19
Runways and Taxiways	1, 4, 6, 7, 8, 9, 11, 15, 16, 17, 18, 19, 20, 21, 22
FBO Galaxy Way Fuel Farm	1
FBO Garside Way Facility	9
Aircraft Deicing	9, 19
Pavement Deicing	1, 4, 6, 7, 8, 9, 11, 15, 16, 17, 18, 19, 20, 21, 22
Sanitary Waste Disposal	19

2.3 Unauthorized Non-Stormwater Discharges Documentation.

Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful and must be eliminated.

Under the MSGP, discharges mixed with allowable non-storm water are not authorized unless the mix is with another allowable non-storm water discharge. Allowed non-storm water discharges are limited to:

- Discharges from emergency/unplanned firefighting activities;
- Fire hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Uncontaminated air conditioning or compressor condensate;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- Pavement wash waters where no detergents have been used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building wash down where no detergents have been used;
- Uncontaminated groundwater or spring water;
- Foundation or footing drains where flows are not contaminated with process materials such as solvents; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but NOT intentional discharges from the cooling tower (i.e., "piped" cooling tower blowdown or drains).

Based upon extensive work completed for the Airport, including the preparation and implementation of the last four Multi-Sector General Permits, the Airport's environmental

consultants, previously The Smart Associates, Environmental Consultants, Inc. and currently Normandeau Associates, Inc., evaluated the potential discharges from the Airport, and determined that the discharges are free of illicit non-storm water discharges at the time of this publication.

2.4 Salt Storage

The 2021 MSGP requires enclosing or covering storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes to prevent exposure to precipitation. The Airport does not store bulk salt or sand/salt piles on the portion of the Airport property subject to the MSGP, and use of salt as a deicing compound is prohibited on the airside portion of the Airport due to its corrosive nature that could adversely affect aircraft and equipment.

2.5 Sampling Data Summary

The Airport's environmental consultants have conducted benchmark sampling and impaired waters sampling pursuant to the requirements of the 1995, 2000, 2008, and 2015 MSGPs and will continue to collect and report such sampling, as required. Sampling data for previous permits are maintained on file at the Airport Administrative Offices located at 1 Airport Road Suite 300 Manchester, NH. Sampling conducted for the 2021 MSGP will be retained in Appendix E of this SWPPP.

3 Stormwater Control Measures

Compliance with the 2021 MSGP (Part 2.0) requires that each facility complete an initial description of its existing and planned Best Management Practices (BMPs). BMPs may be non-structural (practices such as good housekeeping) or structural (physical structures for erosion or sedimentation controls such as storm water ponds, rip rap, etc.).

The Airport is required to comply with the non-numeric technology-based effluent limits listed in Part 2.1.2 of the 2021 MSGP which includes generalized or non-site-specific BMPs to address any potential pollutant sources where BMPs are not currently in place, and to make a determination if the general BMP is appropriate for the facility, and if not, to provide an explanation of why the BMP is not appropriate. The following sections describe the structural and non-structural BMPs to consider at the Airport, existing and planned BMPs specific to the Airport, as well as maintenance programs to evaluate their effectiveness.

In addition to describing the typical stormwater control BMPs, the 2021 MSGP requires considering implementation of enhanced stormwater controls for facilities that could be impacted by major storm events as described in Part in 2.1.1.8 of the permit. Enhanced control measures could include structural improvements, enhanced/resilient pollution prevention measures, and other mitigation measures to help minimize impacts from stormwater discharges from major storm events and particularly flood events. The Airport is primarily located in Zone X “area of minimal flood hazard” based on the most recent FEMA flood insurance risk map. The only flood risk area (Zone AE) is associated with Little Cohas Brook upstream of the diversion structure that carries the brook beneath the south end of runway 35. No industrial activities occur in the Zone AE section of the Airport property as it is a grassy buffer area between runway

35 and an Airport roadway. Therefore, no additional flood control measures are necessary at the Airport as the flood risk is low and existing stormwater control measures are sufficient for minimizing releases of pollutants into stormwater during major storm events. A summary of the stormwater control measures considered and implemented at the Airport is provided in this section.

3.1 Minimize Exposure

The Airport minimizes exposure of pollutants to precipitation by requiring the following Best Management Practices (BMPs):

- The prohibition of washing of aircraft and ground service vehicles outside of hangars, tenant facilities, and/or maintenance buildings.
- The provision of spill cleanup kits at selected locations.
- The requirement that all aircraft and ground service vehicle maintenance be conducted under cover whenever possible.
- The requirement that all applicable Airport staff attend annual training sessions.
- The use of pavement sensors and friction meters to evaluate the need for the application of runway deicing compounds.

3.2 Good Housekeeping

Good housekeeping practices for the Airport facilities include keeping all open areas of the facility clean and orderly. Common problem areas to consider include individual solid waste and recycling storage areas at facilities. BMPs include routine inspections of these areas, regular removal of recyclables, and routine inspections of tanks and containers for leaks and general condition. Rubbish is stored in covered containers that do not contain weep holes, and the entire facility is kept clean from errant litter that might become transported into water bodies with stormwater.

Part 8.S.4.1 of the MSGP lists several recommended general good housekeeping measures to reduce the exposure of potential pollutants to precipitation. The nature and location of control measures and/or procedures employed at the Airport to address this part of the permit are discussed below.

3.2.1 Aircraft, Ground Vehicle, and Equipment Maintenance

Maintenance operations are generally conducted in the Airport's Operations/Maintenance facility, private hangars, the FBO hangars, and to a limited extent, at the gates and parking aprons, to minimize exposure of aircraft and aircraft parts to precipitation. Dry clean-up methods are used to minimize the production of liquid wastes.

3.2.2 Aircraft, Ground Vehicle, and Equipment Cleaning

As noted above, outdoor washing of aircraft is prohibited at the Airport. Vehicle and equipment cleaning is restricted to inside the hangars or the maintenance buildings. Wash waters are discharged to floor drains connected to the City of Manchester sanitary sewer system, thus preventing any discharge of wash water to the storm sewer system.

3.2.3 Aircraft, Ground Vehicle, and Equipment Storage Areas

General aviation aircraft are stored on impervious surfaces or in hangars and aircraft owners are encouraged to use drip pans for the collection of fluid leaks and dry clean-up methods.

Commercial and freight carrier aircraft and ground service equipment are parked on impervious surfaces.

Airport-owned vehicles and equipment are generally stored indoors or under cover.

3.2.4 Material Storage Areas

Potential pollutants are stored inside or in specially designated containers to prevent exposure to precipitation. Used oil is stored in properly labeled containers, and spill clean-up materials are stored nearby in labeled containers to facilitate the rapid clean-up of any inadvertent or accidental spills.

3.2.5 Airport Fuel System and Fueling Area

Fueling airport-owned vehicles is conducted on paved, impervious surfaces. Spill clean-up material stored near the fuel farm facilitate the rapid clean-up of any inadvertent or accidental spills. Bollards have been installed to prevent vehicles from impacting fueling apparatus and thus, minimize the risk of fuel releases in fueling areas. The Airport has prepared and maintains a Spill Prevention, Control, and Countermeasure (SPCC) plan that describes spill response protocols and emergency response measures.

Aircraft and ground service equipment fueling is conducted by the Airport's FBO. The FBO has also prepared and maintains an SPCC plan that describes spill response protocols and emergency response measures.

3.3 Maintenance

To conform to the 2021 MSGP requirements, each facility must have a preventive maintenance program including timely inspection and maintenance of stormwater management devices such as catch basins, oil/water separators, etc. The preventive maintenance program also includes inspection, testing, maintenance, and repairs of facility equipment and systems to avoid breakdowns or failure that may result in discharge of pollutants. The program also includes inspection of all containers used for outdoor petroleum storage to prevent leaking. Routine facility inspections will be completed as required by Part 3.1 of the 2021 MSGP (see Section 5.6.1).

3.4 Spill Prevention and Response

BMPs for spill prevention and response require that a facility maintain spill prevention and response procedures, and that the facility train its employees and tenants on the procedures. Preventive measures include placing barriers between material storage and traffic areas, secondary containment provisions, and implementing procedures for material storage and handling. Response procedures include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills.

Measures for cleaning up hazardous material spills or leaks must be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations including management of waste materials, spill residues, and spill debris. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. Designated Airport personnel are also certified as UST Class A, B, and/or C Operators.

Spill clean-up kits are maintained at several locations, including the Airport fuel farm, the maintenance facility, the terminal, and on the mobile re-fuelers.

Contact information for individuals and agencies that must be notified in the event of a spill is posted in the Operations/Maintenance facility. Additional information regarding spill prevention and response can be found in the Airport's and individual tenants' Spill Prevention, Control, and Countermeasure plans.

3.5 Erosion and Sediment Control

Pursuant to Part 2.1.2.5 of the 2021 MSGP, the facility is required to identify areas that may be subject to significant soil erosion. The facility is not at risk for sedimentation or erosion outside of periodic construction and maintenance activities that may cause ground disturbance. The facility is well graded and slopes maintain adequate vegetation to protect them from erosion. Where appropriate, stormwater outfalls discharge onto riprap and/or grass swales, or other similar erosion prevention BMPs. When ground disturbing maintenance activities are performed, standard temporary erosion and sedimentation controls are utilized to protect surface waters. Standard erosion and sedimentation control measures will also be implemented during future capital improvement construction projects, and coverage will be sought under the EPA Construction General NPDES Permit program and the New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain permit program, as necessary.

3.6 Management of Stormwater

The Airport maintains an extensive stormwater system with multiple stormwater catchment areas, stormwater conveyances and structures including structural BMPS, and outfalls discharging from the Airport property to neighboring surface waters.

3.6.1 Stormwater Catchments and Outfalls

The "airside" of the Airport contributes stormwater runoff from 18 sub-catchment areas to outfalls that discharge into the five receiving waters cited in Section 1.1. Catchment areas located only on the "landside" of the airport that are not affected by Sector S industrial activities are not included in this SWPPP. A summary of the catchment areas included in this SWPPP is provided below:

Catchment Area # 1: Catchment Area # 1 collects stormwater runoff from both airside and landside portions of the Airport, including: portions of Runway 6; the western end of Taxiway M; a small section of Taxiway A; as well as Airport Drive; the Airport's parking garage; parking lot C; the FBO fuel Farm; and property leased by Airport tenant Freudenburg NOK. Catchment Area #1 discharges under the Airport access road through Outfall #1 to South Perimeter Brook.

Much of the runoff from parking lot C is discharged to a state-permitted groundwater infiltration system. Freudenberg NOK is subject to its own coverage under the MSGP (Sector Y/Y1) and completes its own compliance activities and monitoring for stormwater.

Catchment Area #4: Catchment Area #4 collects runoff from the southwestern end of Runway 6 and small portions of the eastern ends of Taxiways M and MI, and discharges under North Perimeter Road and through a level spreader, through Outfall #4, to Pine Island Pond.

Catchment Area #6: Catchment Area #6 collects runoff from the middle portion of Runway 6 and parts of Ammon Drive and Green Drive, including the Ammon Center and property leased by Airport tenant Freudenberg NOK, and discharges under North Perimeter Road through Outfall #6 to a wetland area adjacent to Cohas Brook and in close proximity to Outfall 7. Freudenberg NOK has its own coverage under the MSGP and completes its own compliance activities and monitoring for stormwater.

Catchment Area #7: Catchment Area #7 collects runoff from portions of Runway 6 southwest of the intersection with Runway 17 and a small portion of the northwesterly end of Runway 35. It discharges under North Perimeter Road through Outfall #7 to a wetland area adjacent to Cohas Brook and in close proximity to Outfall 6.

Catchment Area #8: Catchment Area #8 collects runoff from a small section of Runway 17 and discharges under North Perimeter Road through Outfall #8 to a wetland area adjacent to Cohas Brook.

Catchment Area #9: Catchment Area #9 collects runoff from most of Runway 24; Taxiways J, J1 and L; portions of Taxiways B, C, and H; the FBO's Garside Way facility and ramp; portions of the general aviation East Ramp; and the Airport's ARFF/Maintenance Facility; as well as run-on from off-airport commercial properties to the east. Some minor deicing operations are conducted by the FBO in this area. It discharges through an oil/water separator into a large depression located south of the ARFF/Maintenance Garage, then flows through a culvert under North Perimeter Road through Outfall #9 to Cohas Brook.

Catchment Area #10/10A: Catchment Area #10/10A collects runoff from a small section of the northern end of Runway 17 and Taxiway L, and discharges under North Perimeter Road to Cohas Brook. This catchment area is substantially similar to Catchment Area #8, and is, therefore, not included in the quarterly visual monitoring.

Catchment Area #11: Catchment Area #11 collects runoff from a large section of the central portion of Runway 35 and portions of Taxiways A, D, E, F, and H; as well as run-on from off-airport properties located west of the Airport. Stormwater from this catchment area discharges through Outfall #11 to Little Cohas Brook.

Catchment Area #12: Catchment Area #12 formerly collected runoff from what is now Catchment Area #19 and discharged to Little Cohas Brook through Outfall #12. As a corrective action implemented to reduce contaminant discharge to Little Cohas Brook, the Airport, in

coordination with the EPA and NHDES, constructed a new storm sewer line from detention basin 12 directly to the Merrimack River. Outfall 12 now functions as an overflow structure from Detention Pond #12 to Little Cohas Brook during extreme weather condition. As such, Outfall 12 will no longer be included in QVM assessments or Impaired Waters sampling.

Catchment Area #13: Catchment Area #13 formerly collected runoff from a small portion of Airport property in the vicinity of the UPS facility, as well as landside buildings and parking lots. Discharge from this area was directed under the Airport Access Road through Outfall #13 to a ditch that drains to South Perimeter Brook. Observations made during routine QVM monitoring have cited little to no discharge from this outfall, and therefore it will no longer be included in annual QVM assessments or Impaired Waters sampling.

Catchment Area #15: Catchment Area #15 collects runoff from a small portion of Taxiway M and landside runoff from small sections of the Airport Drive and Ammon Drive. It discharges to a treatment swale located southwest of Runway 6, enters a City of Manchester storm sewer and ultimately discharges to the Merrimack River west of Devon Street.

Catchment Areas #16, #17, #18, #18A, and #18B: Catchment Areas #16, #17, #18, #18A, and #18B collect runoff from the southern portion of Runway 35, Taxiways A 1, P, and U; and a small portion of Taxiway A; and discharge to Little Cohas Brook through Outfalls #16, #17, #18, #18A, and #18B. These catchment areas are substantially similar to each other and therefore, only Outfall #16 is included in the annual QVM monitoring.

Catchment Area # 19: As noted above, Catchment Area #19 includes the areas formerly called Catchment Area #12. It collects runoff from the Terminal Area and Gates; the MHT Hex, Fedex, and UPS ramps, the Overnight Parking Area; and portions of Taxiways A, C, D, E, G, and N. These areas include the portion of the Airport where over 90% of the aircraft deicing occurs. Runoff from Catchment Area #19 is directed through oil/water separators to Detention Basin #12 then to a dedicated 36-inch diameter reinforced concrete culvert to the Merrimack River.

Catchment Areas #20, #21, and #22: Catchment Areas #20, #21, and #22 collect runoff from the northeastern end of Runway 24 and direct it to detention and sediment removal BMP structures, before discharging it through Outfalls #20, #21, and #22 to level spreaders and ultimately to wetlands adjacent to Cohas Brook.

3.6.2 Stormwater Management BMPs

The Airport stormwater system utilizes multiple structural and non-structural BMPs to manage stormwater and limit the discharge of contaminants to local surface waters. Stormwater BMPs used at the Airport include:

- Installing and maintaining oil/water separators, level spreaders, catch basins with sumps, and stormwater treatment structures to remove silt and sediment;
- Constructing and maintaining stormwater detention basins;
- Constructing, maintaining, and permitting groundwater recharge structures in parking areas; and

- Implementation of non-structural BMPs such as restricting aircraft deicing and fueling operations to specific drainage catchment areas, prohibition of the use of certain aircraft deicing fluid and urea, and requirements that employees and tenants receive training regarding the requirements of the MSGP and this SWPPP.

3.7 Salt Storage Piles or Piles Containing Salt

As noted in Sections 2.1.6 and 2.4, there are no salt piles or piles containing salt at the Airport.

3.8 Dust Generation and Vehicle Tracking of Industrial Materials

There are no exposed surfaces to generate dust at the Airport and no industrial processes are conducted there that would generate fugitive materials that could subsequently be tracked off-site by vehicles. Paved areas are routinely cleaned to prevent the build-up or accumulation of airborne particulates. During the construction of any required airport improvements, the Airport's consultants and contractors would employ construction BMP's to minimize the generation of dust, and whenever required, develop and implement a separate construction SWPPP.

3.9 Employee Training

The 2021 MSGP (Parts 2.1.2.8) requires that all employees and tenants, who are subject to the requirements of the MSGP, be trained to understand the SWPPP, the MSGP requirements, and stormwater protection in general. Employees of the Airport are trained annually on preventing spills, procedures and protocol for response to a spill, and material handling and storage. The Airport offers similar training to tenants who are subject to the requirements of the permit. Documentation of employee training is included in Appendix F.

3.10 Non-Stormwater Discharges

Based upon observations made during site visits conducted by the Airport's consultants, there are no unauthorized non-storm water discharges at the facility.

3.11 Waste, Garbage, and Floatable Debris

As discussed in Section 2.1.7, trash and other solid waste is placed in receptacles inside the hangars, maintenance buildings, and terminal building. Covered dumpsters are maintained on-site, and trash is regularly removed for proper off-site disposal.

3.12 Contaminated Snow

Part 8.S.5.4 of the 2021 MSGP requires documentation of control measures for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow. Snowmelt runoff is managed in the same way as runoff from liquid precipitation events and is conveyed through oil-water separators and other BMPs prior to discharge. Contaminated snow is to be handled and disposed of in accordance with the Airport's spill prevention, control, and countermeasures procedures detailed in sections 3.4 and 5.3 as well as in the Airport's and tenants SPCC plans and may include dry cleanup methods for disposal as solid waste or may require special handling and disposal for larger spills or if there is contamination with hazardous waste.

3.13 Sector-Specific Non-Numeric Effluent Limitations

In addition to the general permit requirements detailed above, the 2021 MSGP includes sector-specific non-numeric effluent limitations that are recommended where the measures are deemed to be "feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations."

3.13.1 *Good Housekeeping Measures*

Various additional good housekeeping measures are cited in Part 8.S of the MSGP permit that have been adopted as part of the Airport's stormwater pollution prevention program including:

- Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle, and equipment maintenance through the implementation of control measures such as performing maintenance inside, maintaining an organized inventory of material used in the maintenance areas, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the apron or hangar floors, using dry clean-up methods;
- Store all aircraft and ground vehicles awaiting maintenance in designated areas, whenever possible and implement control measures to minimize discharge of pollutants in stormwater from these areas by storing small aircraft and vehicles inside, using drip pans to collect fluids, and when possible;
- Maintain all tanks, drums, and other containers in good condition and whenever possible, store materials inside, store waste materials in centralized locations, and use secondary containment;
- Minimize discharge of pollutants from aircraft and ground vehicle refueling areas by employing proper spill response techniques, using dry clean-up methods, maintaining an SPCC plan, training employees in proper response techniques; and
- Where practicable, employ techniques to reduce the use of aircraft and pavement deicing compounds. The Airport has instituted a policy that prohibits the use of urea on all airside pavements.

The Airport also actively works to reduce pollutant sources as a means of achieving technology based effluent limits including minimizing the use of glycol-based deicing chemicals that can contribute pollutants to stormwater discharges. Urea-based deicing agents are not used at the Airport. The Airport has assessed various corrective actions/BMPs to reduce the BOD/COD load of stormwater effluent from deicing areas such as: the use of hot water in diluting the glycol deicing fluids, adjusting the water to glycol ratio based upon precipitation type and intensity, physical removal of snow and ice by brooms or other methods, and coordinating deicing operations with actual departure times to minimize the need for subsequent additional deicer applications. These BMPs have been recommended to the tenants who perform the deicing operations at the Airport.

3.13.2 *Deicing Season*

Part 8.S.4.2 of the MSGP requires participating airports to determine the seasonal timeframe during which deicing activities typically occur at the Airport. Based upon the Airport's records of aircraft and pavement applications, the deicing season normally extends from September to April.

3.14 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

There are no numeric effluent limitation requirements based on effluent limitation guidelines for the Airport.

4 Water Quality-Based Effluent Limitations and Water Quality Standards

The following BMPs are followed, to the greatest extent practicable to prevent the discharge of potential contaminants to local surface water bodies:

- Aircraft and vehicle maintenance is conducted inside whenever possible;
- Aircraft refueling is conducted on impervious surfaces;
- Mobile refuelers are stored on impervious surfaces;
- Transfer of fuel is avoided during precipitation events to the extent practicable;
- Facility personnel receive annual training to promote compliance with the MSGP requirements;
- Designated employees responsible for the operation of UST facilities receive state and federally required training and biannual certification;
- The UST facilities are equipped with emergency shut-off switches, as well as visual and audible alarms, to preclude significant spillage during fuel transfer operations, and the Airport and FBO maintain SPCC plans; and
- Facilities that use and store potentially hazardous liquids, as well as the FBO's mobile refuelers are equipped with spill clean-up materials.

5 Schedules and Procedures

Schedules and procedures of the regulatory requirements of the MSGP are discussed below. Additional information may be found in facility-specific SWPPPs prepared and maintained by applicable airport tenants and included in Appendix N.

5.1 Good Housekeeping

Good housekeeping practices should be conducted on a regular basis and documented, as necessary. Solid waste is stored in dumpsters and is routinely emptied as needed by a licensed waste hauler. Airport maintenance personnel and tenant employees conduct inspections of containers used to store liquid products to assess the integrity of the containers and identify areas where leaks or spills have occurred. Faulty containers are replaced as necessary and spilled material is cleaned up using materials stored in hangars, the Operations/Maintenance building, and the aircraft refueling facility. All spilled wastes are properly containerized and disposed of off-site in an appropriate manner.

5.2 Maintenance

Parts 6.2.5. 1, and 2.1.2.3 of the 2021 MSGP require that permittees conduct preventative maintenance procedures, including regular inspections; maintenance and repair of all control

measures to avoid situations that may result in leaks, spills, and other releases; and any back-up practices in place should a runoff event occur while a control measure is off-line.

The permittee is further required to maintain all control measures that are used to achieve the effluent limits in this permit in effective operating condition, as well as all industrial equipment and systems, to minimize pollutant discharges. This includes, but is not limited to:

- Performing inspections and preventive maintenance of stormwater drainage;
- Maintaining non-structural control measures (e.g., keep spill response supplies available and personnel appropriately trained);
- Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe;
- Regular inspections of hoses, nozzles, emergency shut off switches, spill clean-up kits, and other BMPs associated with fuel farms and other outdoor storage of potential contaminants;
- Regular clearing of sediment or debris from drainage swales; and
- Removal of sand, debris, garbage, and organic matter from paved surfaces.

If it is determined that control measures are in need of routine maintenance, it must be conducted in a timely fashion in order to minimize pollutant discharges.

Final repairs/replacement of stormwater controls should be completed as soon as feasible but must be no later than the timeframe established in Part 5.1.3 of the 2021 MSGP for corrective actions, i.e., within 14 days or, if that is infeasible, within 45 days. If the completion of stormwater control repairs/replacement will exceed the 45-day timeframe, the permittee may take the minimum additional time necessary to complete the maintenance, provided that they notify the EPA Regional Office of their intention to exceed 45 days, and document in the SWPPP the rationale for the modified maintenance timeframe.

5.3 Spill Prevention and Response Procedures

Facility maintenance activities are generally conducted inside the fixed base operators' hangars, and the Airport's Operations/Maintenance facility. . Drip pans are used to catch incidental leakage during maintenance activities, oil filters and engine parts are drained prior to disposal, and liquid containers are kept sealed unless product is being added or removed. Leaks and spills are cleaned up using spill response material maintained on site in spill kits. All aircraft and ground vehicle re-fueling is conducted on impervious surfaces. The Airport's UST re-fueling facility (NHDES registered UST facility #0111675) consists of one 12,000-gallon gasoline tank and two 12,000-gallon diesel fuel tanks. The facility is equipped with an emergency shut-off switch and is provided with a spill kit. Designated Airport and tenant personnel receive biannual training and are certified as UST Class A, B, and/or C operators, as required by state and federal regulations. The Airport and the FBO maintain site specific SPCC plans and both facilities were deemed to be in compliance during the most recent NHDES site visit. Documentation of spill and leak response will be maintained in Appendix D.

5.4 Erosion and Sediment Control

Standard erosion and sediment controls are used during routine maintenance activities at the Airport and no polymers or chemicals are used for ground stabilization. During major construction projects such products may be used to stabilize exposed ground surfaces, but only in compliance with the requirements found in state and federal construction permits or similar documents.

5.5 Employee Training

Airport and tenant employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of the permit (e.g., inspectors, maintenance personnel), including all members of the stormwater pollution prevention team are required to receive annual training. It is required that the following personnel understand the requirements of the permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures);
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges;
- Personnel who are responsible for conducting and documenting monitoring and inspections as required in Parts 3 and 4; and
- Personnel who are responsible for taking and documenting corrective actions as required in Part 5.

Personnel will be trained in at least the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- An overview of what is in the SWPPP;
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of all controls on the site required by the permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

Documentation of Airport and/or tenant personnel in the form of a training sign-in sheet is maintained in Appendix F.

5.6 Inspections and Assessments

5.6.1 *Routine Facility Inspections*

Routine facility inspections are required to be performed on a quarterly basis in accordance with Part 3.1 of the 2021 MSGP. Sector S facilities are also required to conduct additional routine inspections at least once per month during the deicing season as per Part 8.S.6 of the permit. All inspections must be conducted by qualified personnel and documented as required by Part 6.5 of the permit. A summary of the documentation must be included in the annual report per Part 7.4 of the 2021 MSGP. Any corrective action required as a result of a routine facility inspection must be performed consistent with Part 5 of the 2021 MSGP. Specific elements of the routine facility inspections include:

Persons Responsible for Inspection: All inspections will be conducted by the Airport's Building Superintendent and in all cases must be performed in the presence of a member of the Airport's SWPPP team. Qualified personnel are defined by EPA as those individuals who "possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of control measures."

Schedule for Conducting Inspections: The 2021 MSGP requires that routine facility inspections be conducted at least quarterly plus one per month during the deicing period. At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge event is occurring.

Areas where Industrial Materials are Exposed to Stormwater: In general, inspections should concentrate on areas where industrial materials are exposed to stormwater. At the airport, these areas should include areas where aircraft and pavement deicers are applied, areas where fuel transfer occurs; areas where any tanks, barrels or drums are stored; areas where aircraft and/or ground vehicles are stored outside; areas where spills have occurred in the past 3 years; and areas where solid waste dumpsters are maintained.

Location of Discharge Points: Stormwater discharge points (outfalls) should also be visited during routine inspections to verify that they are functioning properly. The locations of the Airport's outfalls are shown on the attached site map in Appendix B.

Documentation of Routine Facility Inspections: Document all findings, including but not limited to, the following information:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information;
- All observations relating to the implementation of control measures at the facility, including:
 - A description of any discharges occurring at the time of the inspection; any previously unidentified discharges from and/or pollutants at the site;
 - Any evidence of, or the potential for, pollutants entering the drainage system;

- Observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
 - Any control measures needing maintenance, repairs, or replacement;
- Any additional control measures needed to comply with the permit requirements;
- Any incidents of noncompliance; and
- A statement signed and certified by the personnel who conducted the inspection. A routine facility inspection documentation form is included in Appendix G.

5.6.2 Quarterly Visual Assessment of Stormwater Discharges

The 2021 MSGP states that visual assessments of stormwater discharges from facility outfalls is required once each quarter for the entire permit term.

The visual assessment must be made:

- Of a sample in a clean, colorless glass or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and you must document why it was not possible to take the sample within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site; and
- For storm events, on discharges that occur at least 72 hours (three days) from the previous discharge. The 72-hour (three-day) storm interval does not apply if you document that less than a 72-hour (three-day) interval is representative for local storm events during the sampling period.

A qualified individual will visually inspect or observe the sample for the following water quality characteristics:

- Color;
- Odor;
- Clarity (diminished);
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of stormwater pollution.

Personnel conducting the assessments should document their observations using the Quarterly Visual Monitoring form included in Appendix H and maintain this documentation onsite with

your SWPPP as required in Part 6.5 of the 2021 MSGP. Any corrective action required as a result of a quarterly visual assessment must be performed consistent with Part 5 of the 2021 MSGP.

5.7 Monitoring

The 2021 MSGP requires up to six types of analytical monitoring depending upon the facility's industrial sector and certain sector specific thresholds. The six potential types of sampling include:

- Indicator monitoring (2021 MSGP, Part 4.2.1 and relevant requirements in Part 8);
- Benchmark monitoring (2021 MSGP, Part 4.2.2 and relevant requirements in Part 8 and/or Part 9);
- Effluent limitations guidelines monitoring (2021 MSGP, Part 4.2.3 and relevant requirements in Part 8);
- State- or Tribal-specific monitoring (2021 MSGP, Part 4.2.4 and relevant requirements in Part 9);
- Impaired water monitoring (2021 MSGP, Part 4.2.5); and
- Other monitoring as required by EPA (2021 MSGP, Part 4.2.6)

All required monitoring will be performed during a qualifying storm, (i.e. a storm event that results in an actual discharge from the site ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (three days). In the case of snowmelt, the monitoring will be performed at a time when a measurable discharge occurs at the site.

For each monitoring event, except snowmelt monitoring, the following data will be recorded: the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm event. For snowmelt monitoring, the date of the sampling event will be recorded.

5.7.1 Indicator Monitoring

The Airport will be required to complete two rounds of report-only indicator monitoring for polycyclic aromatic hydrocarbons (PAHs) in the first year of coverage under the 2021 MSGP per Part 4.2.1. Indicator monitoring is used to establish baseline conditions and determine industry impacts on stormwater quality. There are no benchmark requirements for PAHs under the 2021 MSGP and there are no requirements for follow-up actions after completing the indicator monitoring. The two rounds of monitoring are to be conducted beginning no sooner than the first full quarter of permit coverage and must be completed by the end of the first permit year, i.e. - February 28, 2022. Indicator monitoring must be completed at all authorized outfalls as reported in the NOI, which is currently 13 outfalls (Outfalls 1, 4, 6, 7, 8, 9, 11, 15, 16, 19, 20, 21, & 22). The list of required analytes is specified in Part 4.2.1.1 of the 2021 MSGP and includes 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene. Samples must be analyzed using EPA Method 625.1, or EPA Method 610/Standard Method 6440B. The laboratory results will be

submitted to the EPA Network Discharge Monitoring Report platform, consistent with Part 7.3 of the 2021 MSGP.

5.7.2 Benchmark Monitoring

Benchmark sampling for Sector S facilities is only required at airports that use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons of urea on an annual basis (Part 8.S.4.1.8). Since the Airport's tenants routinely apply greater than 100,000 gallons of propylene glycol-based aircraft deicing fluid, benchmark sampling will be conducted four times during the deicing season of the first and fourth year of the 2021 MSGP (Part 4.2.2.3) for the sampling parameters list in Table 4-1. All benchmark sampling will be conducted during qualifying storms at outfall 19 only. Two sub-catchments at the Airport (catchment areas 9 and 19) receive stormwater runoff from aircraft deicing operations; however, previous investigations by the Airport, in coordination with NHDES and USEPA, have demonstrated that Outfall 9 only discharges approximately 5% of aircraft deicing fluid and pavement deicers applied annually with the remainder discharging through Outfall 19. Consequently, benchmark monitoring is only conducted at Outfall 19 as exceedances of benchmark thresholds are far more likely to be documented there. Benchmark sampling results will be maintained in Appendix E.

If the annual average for a parameter exceeds the benchmark threshold, Additional Implementation Measures (AIM) will be initiated (Part 5.2), see Section 6, and quarterly benchmark monitoring will continue for that parameter until it is no longer exceeded. AIM triggering event occurs when the four-quarterly annual average for a parameter exceeds the benchmark threshold, or any single annual sample exceeds the benchmark threshold by more than four times for any parameter.

Table 5–1. Benchmark Sampling Parameters and Concentrations

Analytical Parameter	Benchmark Monitoring Concentration
Biochemical Oxygen Demand	30 milligrams per liter
Chemical Oxygen Demand	120 milligrams per liter
Ammonia	2.14 milligrams per liter
pH	6.0-9.0 standard units

5.7.3 Effluent Limitation Monitoring

There are currently no effluent limitation guidelines specified for Sector S Facilities.

5.7.4 State- and Tribal-specific Monitoring

There are no state- or Tribal-specific monitoring requirements for Sector S facilities in New Hampshire.

5.7.5 Impaired Waters Monitoring

Part 4.2.5.1 of the 2021 MSGP requires that any facility that discharges storm water to a body of water that has been identified as being "impaired" on the state's Section 303 (d) List of Impaired

Waters must collect one round of samples from each outfall of the first and fourth year of the permit. During the first year of permit coverage samples are to be collected from each outfall that discharges to the impaired water and the samples are to be analyzed for those water quality constituents for which the receiving waters are impaired. In the fourth year of permit coverage, samples from the same outfalls are to be analyzed for all pollutants causing impairment(s) that are associated with the industrial activity and/or are listed as a benchmark parameter for the subsector(s) (regardless of whether benchmark monitoring has been satisfied for the parameter per Part 4.2.2). If a monitored pollutant is detected or is outside the acceptable waterbody range, continued monitoring is to occur annually for the pollutant until it is no longer detected. Results of impaired waters sampling will be maintained in Appendix E.

5.8 Airport Communications with Tenants

Airport tenants are required to submit their own NOI to obtain coverage under the 2021 MSGP and complete their own compliance activities, including submitting an annual report. The Airport, in collaboration with its tenants, is also permitted in Part 8.S.3.2 of the 2021 MSGP to implement certain permit requirements on behalf of its tenants in order to increase efficiency and eliminate redundancy or duplication of effort. Options available to the Airport Authority and its tenants for implementation of MSGP requirements include:

- The Airport performs certain activities on behalf of itself and its tenants and reports on its activities;
- Tenants provide the Airport with relevant inputs about tenants' activities, including deicing chemical usage, and the Airport compiles and reports on tenants' and its own activities;
- Tenants independently perform, document and submit required information on their activities.

The Airport performs certain compliance activities on behalf of itself and its tenants and reports on these activities as required in the MSGP and submits the results of these activities to the tenants. These activities include routine facility inspections of the Airport facilities (but not the tenant facilities), quarterly visual assessments of stormwater discharges, quarterly benchmark monitoring, impaired waters monitoring, and indicator monitoring. The Airport provides the results of these activities to each of the tenants as they become available and with sufficient time for tenants to report these results in their individual annual reports, as applicable. The Airport also provides annual SWPPP training to its staff as is required under Part 2.1.2.8 of the 2021 MSGP and offers this training to its tenants as well.

Tenants are not required to report the results of quarterly benchmark monitoring (i.e. through NetDMR) as only the Airport reports annual glycol usage and is therefore subject to benchmark monitoring and reporting requirements on behalf of itself and its tenants. Tenants are also not required to report results of impaired waters monitoring or indicator monitoring unless they are performing their own independent monitoring (i.e. in the case of a tenant discharging from an outfall not monitored by the Airport or in the case of a tenant that operates in any MSGP sector other than Sector S). The Airport submits the results of benchmark monitoring, impaired waters

monitoring, and indicator monitoring through NetDMR as required in the MSGP and tenants that rely on the Airport to perform this monitoring on their behalf can indicate on their individual discharge monitoring reports a “No Data Indicator” code “A – General Permit Exemption” for monitoring results at any outfalls that they have listed in their individual NOI.

Results of routine facility inspections and quarterly visual assessment of stormwater discharges, as well as any corrective actions taken by the Airport in the previous year are provided to tenants for inclusion in their annual reports, as applicable. Tenants need only report on those activities conducted by the Airport that pertain to outfalls receiving discharges from their individual materials and/or activities.

Tenants are also required to report on certain activities to the Airport for inclusion in this SWPPP and/or the Airport’s annual report. These activities include annual glycol use, routine facility inspections for those areas of the Airport in which the tenant operates, and any corrective actions taken by the tenants in the previous calendar year, as applicable. The Airport reports total glycol use in its annual report and therefore tenants are not required to independently report their glycol usage on their individual annual reports (tenants should answer “no” on their NOI for the question regarding glycol use).

Tenants have the option to perform activities independently of the airport and document and submit the results of these activities in accordance with their MSGP coverage. Freudenberg NOK performs independent activities for their MSGP Sector Y coverage including quarterly visual monitoring, benchmark monitoring, and indicator monitoring and reports the results of these activities as required in the MSGP. Airport tenants that are located on Airport property and subject to the MSGP but who are not identified as co-located facilities in this SWPPP (e.g. Flight One at the time of this SWPPP preparation) are required to obtain their own separate coverage under the MSGP and complete their own compliance and reporting activities independently of the Airport.

Airport tenants will report their activities to the Airport Environmental Compliance Specialist via email and/or telephone communication according to the following schedule:

- Corrective actions will be reported to the Airport Authority immediately for all MSGP industrial activities;
- Any modification of a tenant SWPPP, whether the result of a corrective action or otherwise, will be immediately communicated to the Airport. The revised SWPPP will be provided to the Airport as soon as it is available for incorporation into the Airport’s comprehensive SWPPP;
- Prior to submittal of annual reports, each tenant will report to the Airport any relevant input about tenant activities during the previous year, including routine facility inspections, monitoring results, summary of corrective actions, and deicing/anti-icing chemical quantities used, as applicable;
- Any required follow-up action will be coordinated with the Airport Environmental Compliance Specialist and will be determined on a case-by-case basis. The timeframe

for follow-up action will comply with the MSGP (e.g. for corrective actions), as applicable, and will be established at the time of the initial communication between the tenant and the Airport.

5.9 Notice of Permit Coverage

The Airport is required in Part 1.3.5 of the 2021 MSGP to post a sign or other notice of permit coverage at a safe, publicly accessible location in close proximity to the Airport facility. The sign must have a font size large enough to be readily viewed from a public right of way and must be maintained to be legible, visible, and factually correct. The sign is to include the following:

The Manchester-Boston Regional Airport is permitted for
industrial stormwater discharges under the U.S. EPA's Multi-
Sector General Permit

NPDES ID NHR053247

To obtain additional information for this facility, including the
Stormwater Pollution Prevention Plan (SWPPP), please contact the
Airport Environmental Compliance Specialist at 603-624-6539.

To report observed indicators of stormwater pollution, please
contact EPA at 617-918-1577

5.10 Annual Report

Permittees must submit an Annual Report to EPA electronically, per Part 7.2, by January 30th for each year of permit coverage containing information generated from the past calendar year. The Annual Report must include the following information:

- A summary of the past year's routine facility inspection documentation required (Part 3.1.6).
- A summary of the past year's quarterly visual assessment documentation (see Part 3.2.3 of the permit);
- A summary of the past year's corrective action documentation (see Part 5.3). If corrective action is not yet completed at the time of submission of your annual report, the status of any outstanding corrective action(s) must be described in the report. Also any incidents of noncompliance in the past year or currently ongoing must be described, or if none, provide a statement of compliance with the permit.

Copies of EPA's Annual Report template and completed annual reports prepared under this permit are included in Appendix I.

6 Documentation to Support Eligibility Considerations Under Federal Laws

6.1 Documentation Regarding Endangered Species

Pursuant to Part 1.1.4 *Endangered and Threatened Species and Critical Habitat Protection* coordination with the U.S. Fish & Wildlife Service (USF&WS) was initiated to determine if any federally listed threatened or endangered species or their critical habitat are known to exist in proximity to the Airport. A single threatened species, the Northern Long-eared Bat was identified as potentially being present. No critical habitats were listed within the Airport's project area (Airport property). The National Marine Fisheries Service (NMFS) was consulted regarding federally listed marine and estuarine species within the project area. There were no federally listed species identified by NMFS within the project area. Therefore, the Airport meets Criterion C1 for eligibility in the 2021 MSGP – i.e. the Airport was eligible for Criterion C in the 2015 MSGP and there have been no changes to listed species, critical habitat, or action area since 2015. Copies of the endangered species documentation data are included in Appendix J.

6.2 Documentation Regarding Historic Properties

Coordination with the New Hampshire Division of Historic Resources (NHDHR) was conducted pursuant to acquisition of the 2008 MSGP and based upon data submitted to the agency, they found that operations conducted at the Airport result in:

...no adverse effect pursuant to 36 CFR 800.5 on any properties or districts that are listed or may be eligible for the National Register or properties of known or potential architectural, historical, archaeological, or cultural significance.

Therefore, the Airport, which is an existing facility that was covered under the 2015 MSGP with no plans to construct or install any new stormwater control structures, meets Criterion A of the MSGP and no further requirements are anticipated for procedures relating to historic properties preservation.

7 Corrective Actions

Pursuant to Section 5.0 of the 2021 MSGP, if any of the conditions described below occur, the Airport will review and revise the selection, design, installation, and/or implementation of control measures to ensure that the condition is eliminated and will not be repeated in the future:

- An unauthorized release or discharge occurs at the Airport facility;
- A discharge violates any future numeric effluent limits;
- The Airport becomes aware, or the EPA determines, that any control measures are not stringent enough for the discharge to meet applicable water quality standards or meet the non-numeric effluent limits in the permit;
- The Airport during the course of conducting any of the inspections described in the SWPPP, determines that any control measures are not being properly operated or maintained; or
- Whenever a visual assessment shows evidence of stormwater pollution.

If any Airport improvement projects or other changes in design, operation, or maintenance of the Airport will cause significant changes to the nature or quantity of pollutants discharged in storm water from the Airport, the Airport or its consultants must review the selection, design, installation, and/or implementation of control measures to determine if modifications are necessary to meet the effluent limits in the 2021 MSGP.

The Airport, upon discovery of any condition requiring a corrective action or potentially requiring a corrective action, will immediately (either the same day or the following work day morning depending on the time of discovery) take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution can be implemented. This includes cleaning up any contaminated surfaces and/or making arrangements for installation of a new control measure so that the material will not be discharged into stormwater. The Airport will prepare the following documentation upon discovery of any condition requiring (or potentially requiring) corrective action:

- Identification of the condition triggering the need for corrective action review;
- Description of the problem identified;
- Date the problem was identified; and
- Any immediate corrective actions taken.

Within 14 days of the discovery of any condition requiring a corrective action or potentially requiring a corrective action, or prior to the next storm event if possible, the Airport will complete any corrective actions and prepare the following documentation:

- A summary of the corrective action taken or the basis for determining why no corrective action was required;
- A notice of whether SWPPP modifications are required as a result of the discovery of the corrective action;
- The date the corrective action was initiated, if one is required; and
- The date the corrective action was completed or is expected to be completed.

Modifications to control measures will be completed prior to the next storm event, or as soon as practicable after the next storm event.

Documentation of any corrective actions will be included in the annual compliance report and maintained in Appendix K of this SWPPP.

Modifications to this SWPPP in response to a corrective action required by Part 5.0 of the 2021 MSGP will be made by the Airport or its consultant and documented in Appendix L. When any such modifications are made, the SWPPP Certification in Section 7 of this SWPPP will be re-signed in accordance with 2021 MSGP Appendix B, Subsection 11.B.

7.1 Additional Implementation Measures

Additional implementation measures (AIM) will be initiated in accordance with Part 5.2 of the 2021 MSGP to address exceedances of the benchmark monitoring threshold values. There are three AIM levels and a baseline condition with no AIM requirements. If the annual average for a benchmark monitoring parameter exceeds the benchmark threshold then AIM Level 1 responses are required and benchmark monitoring must continue for the next four quarters for the AIM triggering parameter at all affected stormwater discharge points. If AIM Level 1 responses are completed and continued quarterly benchmark monitoring indicates an AIM triggering event has occurred, then initiation of AIM level 2 responses will occur. If further AIM triggering events occur following completion of AIM Level 2 responses then initiation of AIM level 3 responses must occur. If AIM responses are completed and any four quarter monitoring does not result in AIM triggering event, monitoring will revert back to baseline sampling in accordance with the permit.

An AIM triggering event occurs when the four-quarter average for a parameter exceeds the benchmark threshold, or any single sample exceeds the benchmark threshold by more than four times for any parameter.

AIM Level 1 responses: Review SWPPP and current control measures to ensure the effectiveness of the existing measures and determine if modifications are necessary. Following review of the SWPPP and existing control measures, any additional control measures that would reasonably be expected to bring exceedances below the parameter's benchmark threshold will be implemented within 14 days of receipt of laboratory results, if feasible. If it is determined that existing control measures are expected to bring benchmark indicators below the benchmark threshold for the next 12-month period, then no further control measures will be implemented and the basis for this expectation will be documented in accordance with Part 5.3 of the permit and included in the annual report. If it is infeasible to make the required modifications within 14 days, the rationale for not making the modifications in that timeframe will be documented per Part 5.3 and all modifications are then required within 45 days.

AIM Level 2: Review SWPPP and implement additional pollution prevention/good housekeeping control measures beyond AIM Level 1 recommended controls that would reasonably be expected to bring exceedances of benchmark thresholds to levels below the threshold values. All control measures will be implemented with 14 days of receiving laboratory results indicating an AIM triggering event. If it is infeasible to make the required modifications within 14 days, the rationale for not making the modifications in that timeframe will be documented per Part 5.3 and all modifications are then required within 45 days. EPA may also grant an extension beyond 45 days to implement additional control measures based on an appropriate demonstration justifying the need for such an extension.

AIM Level 3: Install structural source controls, and/or treatment controls unless an AIM exception can be made as allowed in Part 5.2.6 of the permit. AIM exceptions include AIM triggering events solely attributable to natural background pollutant levels, run-on from neighboring sources, exceedances due to an abnormal event, or if it can be demonstrated that the AIM triggering event does not result in any exceedance of water quality standards. The controls or treatment technologies installed must be appropriate for the pollutants that triggered AIM

Level 3 and more rigorous than the pollution prevention/good housekeeping-type stormwater control measures implemented under AIM Tier 2. Controls will be selected for pollutant removal efficiencies that are sufficient to bring exceedances below the benchmark threshold at all discharge point(s) in question and for substantially identical discharge points. All control modifications will be identified and scheduled for installation within 14 days of receiving laboratory results indicating an AIM triggering event. Control measures will be implemented within 60 days unless doing so within 60 days is infeasible. If it is infeasible to make the required modifications within 60 days, the rationale for not making the modifications in that timeframe will be documented per Part 5.3 and all modifications are then required within 90 days. EPA may also grant an extension beyond 90 days to implement the additional control measures based on an appropriate demonstration justifying the need for such an extension.

8 SWPPP Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certification by Airport Responsible Party:

Name: Luis Elguera Title: Asst. Airport Director
Signature: [Signature] Date: 6-15-22

Certification by FedEx Responsible Party:

Name: Frankie Phelan Title: Ramp Operations Manager
Signature: [Signature] Date: 6/9/22

Certification by United Parcel Service (UPS) Responsible Party:

Name: Daniel Goggin Title: Manager
Signature: [Signature] Date: 6/14/22

Certification by Southwest Airlines Responsible Party:

Name: Tom Labrie Title: Station Manager
Signature: [Signature] Date: 06/09/22

Certification by American Airlines Responsible Party:

Name: TERENCE MCCARTHY Title: GENERAL MANAGER
Signature: [Signature] Date: 6/13/22

Certification by Spirit Airlines Responsible Party:

Name: [Signature] Title: General Manager / WFS
Signature: Jessica Nunez Date: 6/9/22

Certification by United Airlines Responsible Party:

Name: Pamela Watson Title: Station Manager
Signature: Pamela Watson Date: 09 JUN 22

Certification by Signature Flight Services Responsible Party:

Name: ANDREW KAZAKIS Title: DUTY MANAGER
Signature: Andrew Kazakis Date: 6/9/22

Certification by Wiggins Airways Responsible Party:

Name: TOM EDWARDS Title: Dir. of Safety
Signature: [Signature] Date: 6-15-2022

Certification by Freudenberg NOK Responsible Party:

Name: Karin Smith Title: FAC MAINT SUP
Signature: K-S Date: 6-9-22

9 SWPPP Modifications

This SWPPP is required to be modified and updated, as necessary, in response to corrective actions, as described in Part 5 of the 2021 MSGP. If the SWPPP needs to be modified in response to a corrective action required by Part 5.1.1 or 5.1.2 of the 2021 MSGP, then the certification statement in Section 8 of this SWPPP template must be re-signed in accordance with 2021 MSGP Appendix B, Subsection 11.A. For any other SWPPP modification, the Airport will keep a log with a description of the modification, the name of the person making it, and the date and signature of that person (see 2021 MSGP Appendix B, Subsection 11.C). The log of SWPPP modifications will be retained in Appendix L of this SWPPP.

ATTACHMENT III

Attached Spill Prevention Control and Countermeasure Plan

2021 Spill Prevention Control and Countermeasure Plan

Manchester-Boston Regional Airport

Prepared For

Manchester-Boston Regional Airport
One Airport Road
Manchester, NH 03103



Prepared By

Normandeau Associates, Inc.
25 Nashua Road
Bedford, NH 03110
www.normandeau.com



October 2021

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INTRODUCTION

This Spill Prevention, Control, and Countermeasure Plan (SPCC) was prepared for Manchester-Boston Regional Airport (the Airport) located in the City of Manchester and the Town of Londonderry, New Hampshire. The purpose of this document is to describe measures implemented by the Airport to prevent oil discharges from occurring, and to prevent accidental releases that do occur from impacting "Waters of the United States" by implementing safe, timely, and appropriate remedial measures. For the purposes of this SPCC plan oil means:

Oil of any kind or in any form, including, but not limited to: fats, oils, or grease of animals, fish, or marine mammal origin; vegetable oils including from seeds, nuts, fruits, or kernels; and other oils and greases, including: petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil. 40 CFR part 112.2

The elements of this SPCC were prepared and implemented in accordance with the regulatory requirements found at 40 CFR part 112 and required by New Hampshire Department of Environmental Services' (NHDES) Administrative Rule Env-Or 300.

MANAGEMENT APPROVAL

The Manchester-Boston Regional Airport (hereinafter, Airport or MHT) is committed to the prevention of discharges of oil to Waters of the United States and the environment and maintains the highest standards for spill prevention control and countermeasures through regular review, updating, and implementation of this SPCC Plan.

Authorized Facility Representative: Thomas J. Malafronte, A.A.E., Deputy Airport Director


Signature: _____

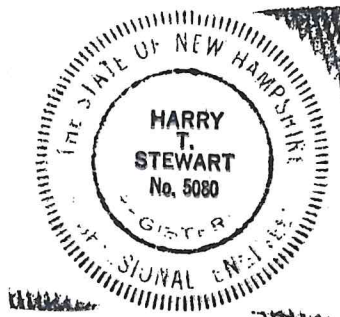
Date: _____

PROFESSIONAL ENGINEER CERTIFICATION
40 CFR 112.3(D)

CERTIFICATION

I hereby certify that I have examined the facility and being familiar with the provisions of 40 CFR part 112, attest that this Spill Prevention Control and Countermeasure (SPCC) Plan has been prepared in accordance with good engineering practices.

Signature:	
Engineer:	Harry T. Stewart
Registration Number:	5080
State:	NH
Date:	July 12, 2022



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN REVIEW PAGE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan will be conducted at least once every five years. As a result of this review and evaluation, the Airport will amend this SPCC Plan within six months of the review to include more effective prevention and control technology if:

- (1) Such technology will significantly reduce the likelihood of a spill event from the facility, and
- (2) If such technology has been field-proven at the time of the review.

Furthermore, in accordance with 40 CFR 112.3(d), any amendment to the SPCC Plan shall be certified by a Professional Engineer, if required, within six months after a change in the facility design, construction, operation, or maintenance activities that materially affect the facility's potential for the discharge of petroleum products into or upon the navigable waters of the United States or adjoining shorelines. The Professional Engineer reviewing this plan will sign below after each review, as necessary. Changes to the SPCC plan implemented in 2004, 2008, 2012, 2016, and 2021 were minor and there were no substantial changes at the facility that would materially change potential discharges.

Review Date	Signature
1. Version 2 - 2004	No Signature Required
2. Version 3 – 2007-2008	No Signature Required
3. Version 4 - 2012	No Signature Required
4. Version 5 - 2016	No Signature Required
5. Version 6 - 2021	No Signature Required

LOCATION OF SPCC PLAN

In accordance with 40 CFR 112.3(e) a copy of this SPCC will be maintained in the Airport Deputy Director's office at One Airport Road, Suite 300 in Manchester, New Hampshire. An additional copy will be maintained at the Airport Operations and Maintenance Facility located at 400 Kelly Avenue in Manchester, New Hampshire.

SPCC HISTORY AT MANCHESTER-BOSTON REGIONAL AIRPORT

Although not a regulatory requirement, Manchester-Boston Regional Airport initially prepared a SPCC Plan (the Plan) in December 1990 as a best management practice for preventing a discharge of oil into or upon the navigable waters of the United States. When the Airport

prepared the Plan in 1990, the amount of petroleum storage owned and operated by the Airport was substantially below the capacity requirements as defined by 40 CFR 112.1, (i.e., the Airport did not own and operate an aboveground storage tank (AST) with a volume greater than 660 gallons or have a total volume capacity greater than 1,320 gallons aboveground or 42,000 gallons below ground). In 1990, several bulk storage facilities existed at the Airport; however, these facilities were owned and operated by various Airport tenants. The Airport prepared and maintained a SPCC Plan from December 1990 through June 1999, which served as a best management practice. At no time prior to June 1999 did the Airport own or operate volume capacities requiring the preparation of an SPCC Plan.

In 1999, three occurrences took place that required the Airport to revisit its current Plan and to prepare and maintain a more comprehensive SPCC Plan. These occurrences included:

- 1) The installation of a 2,000-gallon diesel fuel aboveground storage tank (AST) at the Airfield Lighting Vault,
- 2) The installation of a 500-gallon used oil AST at the Operations/Maintenance Facility, and
- 3) Taking responsibility for the operational activities of Building T-841, the former Precision Airlines Hangar.

These events became trigger mechanisms that warranted a more comprehensive Plan. Since the creation of the original Plan (November 24, 1999), all ASTs and USTs associated with Building T-841 were closed and removed, and the hangar was subsequently demolished in November 2000.

The 1999 SPCC plan was updated in 2004 to reflect changes in the Maintenance facilities UST storage capabilities (NHDES UST facility 0201007). Two 10,000-gallon USTs (tanks #1 and #2) were permanently closed and replaced with three 12,000-gallon tanks.

Minor changes were made to the SPCC plan in 2007 and 2012 to reflect amendments in the federal regulations.

The Airport is not a Substantial Harm Facility as defined by 40 CFR 112, and therefore the Airport is not required to prepare or maintain a Facility Response Plan under the Oil Pollution Act of 1990. Appendix A of this Plan presents the "Certification of the Applicability of the Substantial Harm Criteria Checklist."

SCOPE OF PLAN

This plan is intended to meet the Oil Pollution Prevention requirements of the Clean Water Act as defined by 40 CFR 112, as amended. In addition to the Airport owned and operated facilities, several commercial and industrial tenants lease property at the Airport. This SPCC Plan addresses the Oil Pollution Prevention activities at the Airport owned and operated facilities (e.g., Airport Operations/Maintenance Facility, Airfield Lighting Vault, Airport use buildings, etc.). This Plan does not cover the Oil Pollution Prevention activities of the Airport's tenants. Each tenant subject to the Oil Pollution Prevention requirements of the Clean Water Act is

required to prepare a facility-specific SPCC Plan covering that tenant's operations, as defined by the Airport-tenant lease agreement. Appendix B lists the Airport tenants that are required to prepare a SPCC Plan, as well as a list of tenants managing petroleum products at their respective facilities.

Cross-Reference with SPCC Rule

Provision	Plan Section	Page(s)
112.3(d)	Professional Engineer Certification (not applicable)	2
112.3(e)	Location of SPCC Plan	3
112.4	Discharge Discovery and Notification	19
112.5	Plan Review	3
112.7	Management Approval	1
112.7	Cross Reference with SPCC Rule	6
112.7 (a)(3)	General Facility Information Facility Diagram	7; Appendix D
112.7(a)(4)	Discharge Notification	19
112.7(a)(5)	Spill Mitigation Procedures	23
112.7(b)	Potential Discharge Volume and Direction of Flow	25
112.7(c)	Containment and Diversionary Structures	29
112.7(e)	Inspections, Tests, and Records Facility Inspection Checklists	34; Appendix E
112.7(f)	Personnel Training; Discharge Prevention Briefing Log	36; Appendix F
112.7(g)	Security	33
112.7(h)	Fuel Transfer Activities	13
112.7 (i)	Brittle Fracture Evaluation (not applicable)	35
112.70)	Conformance with Applicable State and Local Requirements	18
12.20(e) & 112.20(f)(I)	Certification of Substantial Harm Determination	Appendix A

1 PART 1: GENERAL FACILITY INFORMATION 40 CFR 112.7(a)(3)

1.1 Facility Information

Facility Owner: City of Manchester
 Department of Aviation
 One Airport Road, Suite 300
 Manchester, NH 03103-3395
 (603) 624-6539

Facility Operator: City of Manchester
 Department of Aviation
 One Airport Road, Suite 300

Manchester, NH 03103-3395
(603) 624-6539

1.2 Contact Information

The designated person accountable for overall oil spill prevention and response at the facility, also referred to as the facility's "Response Coordinator" is Thomas J. Malafronte. 24- hour contact information is included in Table 1–1.

Table 1–1. Facility Contact Information

Name	Telephone	Title
Mr. Thomas J. Malafronte, A.A.E. (Primary)	Office: (603) 624-6539 Mobile: (603) 365-7094	Deputy Airport Director
Mr. Luis Elguezabal, A.A.E. (Secondary)	Office: (603) 624-6539 Mobile: (603) 851-1106	Assistant Airport Director Operations and Facilities

1.3 Facility Description

Manchester-Boston Regional Airport (Airport) is located in the City of Manchester and the Town of Londonderry, New Hampshire (see Appendix C, Figure 1). The Airport supports both commercial and general aviation operations. The Airport's hours of operation are 24 hours per day, 365 days per year.

The facility began operations in the 1920s as a civilian airport and was a military base in the 1940s. At that time, oil storage consisted of numerous ASTs and underground storage tanks (USTs), including an "aquafuel" system supported by multiple USTs. Over the years, approximately 100 USTs and ASTs have been removed and properly closed.

1.4 Facility Storage & Operations

The Airport uses petroleum products, including motor oil, heating fuel, gasoline, and diesel fuel during routine operations. Airport personnel do not handle any aviation fuel. The Airport receives products by common carrier via tank truck (e.g., diesel and gasoline) and routine vehicle shipments (e.g., motor oil and hydraulic oil). No petroleum products are shipped onto the Airport via vessel or pipeline.

Substances regulated under the SPCC program are stored and used by the Airport at several locations in ASTs, USTs, 55-gallon drums, and smaller non-regulated containers. A summary of the regulated storage containers is included in Table 1–2. Each storage location is identified on the attached site plans in Appendix D and further addressed below.

1.4.1 Airfield Electrical Vault

Petroleum storage at the Airport's Airfield Electrical Vault consists of a double- walled, interstitial-monitored 2,000-gallon AST (see Photograph #1 in Appendix C). The tank contains diesel fuel and supports the emergency generator for the Airfield Electrical System. Fuel from

the tank is shunted to a 150-gallon day tank located inside the generator housing (Photograph #2) to run the generator. A sump with a probe is located between the two tanks; the sump contains any potential leak as fuel passes from the 2,000-gallon tank to the 150-gallon day tank.

Table 1–2. Manchester-Boston Regional Airport Regulated Storage Tank Inventory

Location/NHDES Facility#	Container Type & Capacity	Stored Substance
Airfield Electrical Vault AST Facility #990728A Tank #1	AST - 2,000 gallons AST - 150 gallons	Diesel Fuel Diesel Fuel
Maintenance Facility AST Facility #0201007 Tank #1 Tank #2 Tank #3 Tank #4 Tank #5	AST - 500 gallons AST - 500 gallons AST - 500 gallons AST - 500 gallons Drums - 6x55 gallons	Motor Oil Motor Oil Hydraulic Oil Used Oil Miscellaneous Oils
UST Facility #OJ 11675 Tank #6 Tank #7 Tank #8	UST- 12,000 gallons UST - 12,000 gallons UST- 12,000 gallons	Diesel Fuel Diesel Fuel Gasoline
Maintenance Facility Annex (No registration required)	AST - 240 gallons	Diesel Fuel
Airport Terminal Building (No registration required)	AST - 80 gallons	Diesel Fuel
Airport Parking Garage AST Facility #0105008 Tank #1	AST - 700 gallons	Diesel Fuel
Ammon Center UST Facility #0111676 Tank #2	UST - 10,000 gallons	#2 Heating Oil
Total AST Capacity	5,500 gallons	
Total UST Capacity	46,000 gallons	

1.4.2 Maintenance Facility

The Maintenance Facility complex (Site Plan 1) is located on the northeast side of the Airport and is comprised of the current Airport Maintenance/Aircraft Rescue and Fire Fighting Facility (ARFF), the Maintenance Facility Annex, the Maintenance Complex Fueling Station, and a Sand Storage Building. Petroleum storage at the Maintenance Facility consists of the following:

- The regulated ASTs (Photographs #3 and #4) cited in Table 1–2;
- Several 55-gallon drums containing engine oil, grease, and used lubricants, transmission fluid, and used fuels;
- Smaller containers of gasoline, oils, and lubricants; and

- Fuel tanks and crankcases on vehicles temporarily stored in the maintenance garage pending service;
- There is no petroleum storage associated with the ARFF portion of the building.

As of June 2001, the Former Maintenance Building has been used for storage only. Petroleum storage at the Former Maintenance Facility consists of the following:

- The 240-gallon diesel fuel tank (Photograph #5) cited in Table 1–2; and
- Small plastic gasoline storage containers.

The Maintenance Complex Fueling Station is located just northeast of the current Maintenance Facility and consists of the three 12,000-gallon USTs cited in Table 1–2 and associated piping, pumps (Photograph #6), and monitoring equipment.

There is no petroleum storage associated with the sand storage building except for the fuel tanks and crankcases on trucks and loaders that use the facility.

The Airport owns and operates numerous motor vehicles with fuel tanks whose volume exceeds 50 gallons. When not in use, these vehicles are generally stored inside airport-owned buildings. Table 1–3 lists all such vehicles owned by the Airport in September 2021. The total capacity of all vehicle tanks is 7,494.5 gallons.

1.4.3 Terminal Building

Petroleum storage at the Airport Terminal Building consists of the 80-gallon day tank (Photograph #7) cited in Table 2 that supports one of two Terminal Building emergency generators. The second generator is fueled by natural gas.

Other areas within the terminal building in which oil is used or stored include:

- Six elevators, each of which has a tank containing hydraulic oil;
- Small quantities of oil and lubricants used to service tugs and other ground service equipment; and
- Small quantities of oil and lubricants maintained and used by the various airlines.

All re-fueling of aircraft at the terminal gates and/or the parking aprons is conducted by the Airport's FBO. Any actions relating to spills or other accidental releases of oil from these operations are the responsibility of the FBO and/or the airlines.

Table 1–3. Airport Vehicles with Tanks in Excess of 55 Gallons

Vehicle No.	Vehicle Type	Tank Number-Size (Gallons)
AP-9	Mack Truck Plow	2-59
AP-10	Mack Plow Truck	2-59

Vehicle No.	Vehicle Type	Tank Number-Size (Gallons)
AP-11	Mack Plow Truck	2-59
AP-13	Mack Plow Truck	2-59
AP-14	Jet-Air Truck	1-75 & 2-40
AP-15	Deicer Truck	1-75
AP-16	2004 International I0-Wheel Deicer	1-105
AP-19	1998 Mack 6-Wheel Plow	1-87
AP-21	1990 Mack 10-Wheel Sand Truck	1-75
AP-23	International Severe Duty Plow Truck	1-105
AP-24	Mack Plow Truck	1-220
AP-25	2002 Oshkosh Plow	2-50
AP-26	2004 International Plow Truck	1-105
AP-30	2020 Vammas Blower	1-275
AP-90	2020 Vammas Blower	1-275
AP-50	2020 Vammas Blower	1-275
AP-60	1996 Rolba Blower	1-275
AP-63	Cat Loader	1-98
AP-70	2004 Oshkosh Blower	2-128
AP-73	Cat Loader	1-52
AP-77	Cat 824 Loader	1-177
AP-80	Oshkosh Blower	2-128
AP-83	1999 Cat 980G Loader	1-122
AP-88	Cat 824 Dozer	1-156
AP-93	Case Loader	1-104
AP-99	1990 Cat 824C Dozer	1-156
AP-B1	1998 Oshkosh 18' Broom	2-128
AP-B2	1993 Oshkosh 18' Broom	2-128
AP-B3	2020 Vammas 22" Broom	2-250
AP-B4	2003 Oshkosh 18' Broom	2-128
AP-B5	2003 Vammas Broom	2-79.25
AP-B6	2003 Vammas Broom	2-79.25
AP-B7	2003 Vammas Broom	2-79.25
EZ2	Oshkosh T3000 Crash Truck	1-75
EZ7	Oshkosh T3000 Crash Truck	1-75
135-PD	Portable Melter	1-1500
20-PD	Portable Melter	1-25
Total Vehicle Fuel Capacity		7,494.5 gallons

1.4.4 Airport Parking Garage

Petroleum storage at the Airport Parking Garage consists of a 700-gallon double-walled AST (Photograph #8), cited in Table 1–2, which supports the garage's emergency generator. The tank is located adjacent to the garage along the facility's southwest wall. The tank is equipped with secondary containment and is beneath the generator within the generator housing. The tank housing (Photograph #9) rests on a concrete pad, surrounded by crushed stone.

1.4.5 Ammon Center

The former terminal building for the Airport is located at 175 Ammon Drive. The building is leased to various tenants by the Airport. The heating system for the building is fueled by a 10,000-gallon fiberglass tank containing #2 heating oil (Photograph # 10). The day-to-day operations of this tank system are monitored by the Airport.

1.4.6 Former Wiggins Hangars

In the spring of 2004, Wiggins Airways completed their new fuel storage facility and vacated their former operations at 5 & 7 Green Drive. The two hangars have since been removed as part of a new cargo development project.

Twelve USTs at the site, ranging in size from 500 to 10,000 gallons, were permanently closed in 1997. Two 50,000-gallon underground storage tanks remained on site and were registered in the Airport's name on June 16, 2004. These tanks were emptied of Jet A Fuel and cleaned in May 2004 by Cyn Environmental, and permanently closed in place in 2012. The two, 50,000 gallon tanks were removed in December of 2021 as part of the cargo development project.

Two previously unregistered USTs (one 6,000-gallon tank and one 2,000-gallon tank) were discovered during the closure of the two 50,000-gallon tanks. These tanks were registered with the NHDES and permanently closed in 2011.

Three 12,000-gallon ASTs (NHDES Facility #970710A) were permanently closed and removed in 2004. The Airport registered these tanks in their name on June 16, 2004. These tanks were emptied of Jet A Fuel and cleaned in May 2004 by Cyn Environmental.

1.4.7 Sand Storage Facility

In 2007, the Airport constructed a sand/salt storage facility off South Perimeter Road (Photograph #11). The facility is used for the storage of a sand/salt mixture that is used for landside roadway and parking lot deicing. Facility-related vehicles are stored under cover. The facility has a concrete floor and paved outside parking areas and no significant spill or other release is likely to occur.

1.4.8 MHT Hex Hangars

The MHT Hex Hangars (formerly known as the Aero-Hex Hangars) are in the south/central portion of the Airport. These hangars are used for the storage of aircraft and aircraft-related parts, supplies, and equipment. Tenants are only allowed to do minor maintenance such as oil changes, and only incidental quantities of oil are stored in them.

1.4.9 Pro Star Aviation Building

The Former Micro-Communications Building was previously an industrial facility owned by the Airport and is currently leased to Pro Star Aviation. No oil-related substances are stored in the building except incidental quantities associated with the vehicles. A former floor drain was filled and sealed by the previous tenant prior to the Airport takeover of the facility.

1.5 Transfer Activities

Buried piping at the Airport that routinely contains petroleum products is the piping associated with the gasoline and diesel UST fuel pumps for vehicles at the Maintenance Complex Fueling Station and the 2,000-gallon diesel fuel tank at the Airfield Lighting Vault. Each of these piping systems has secondary containment with an interstitial leak detection system and is non-metallic. Each of the systems drains back to a sump that can be inspected at any time. None of the piping is pressurized.

All underground primary piping at the Airport consists of flexible Teflon, and all secondary piping consists of flexible PVC or HDPE. The piping allows for expansion and contraction of the piping. All pipe supports are located as to prevent abrasions (e.g., within the dispenser and tank sumps). In addition, given the slope of the piping, all underground piping and pipe supports are monitored by automatic leak detection systems.

All aboveground piping associated with Airport owned and operated bulk storage tanks are inspected monthly by Airport Maintenance personnel. In addition, Airport and/or tenant personnel observe most aboveground piping at the Airport daily. Any significant deficiencies observed by the Airport or tenant personnel are immediately reported to ARFF and/or the Airport Communications Center.

All aboveground piping at the Airport is protected from vehicular traffic via fencing, barriers, and/or an enclosing structure. No aboveground piping that contains product can be damaged by vehicular traffic without first causing significant damage to a fence, barrier, and/or enclosing structure.

1.5.1 Facility Tank Car and Truck Off-Loading Operations

The Airport requires fuel delivery drivers to comply with Department of Transportation (DOT) 49 CFR part 177, general information, and regulations applicable to the acceptance and transportation of hazardous materials by private, common, or contract carriers by motor vehicle, and facility standard operating procedures. All deliveries must be authorized by the Airport to load or unload product at Airport operated facilities. Except for the AST at the Parking Garage and the heating oil tank at the Ammon Center, all loading and unloading areas are in secured areas within the Airport's airside operations, and therefore cannot be accessed without Airport authorization and an escort. The fill stand associated with the Parking Garage AST is locked, and therefore cannot be filled without authorization by the Airport. The fill stand associated with the Ammon Center fuel tank is locked and can only be opened by authorized personnel.

Maintenance personnel are present during filling operations associated with all Airport operated bulk storage tanks and have direct radio access with ARFF and spill response personnel during the entire filling process.

The only Airport operated bulk fuel storage tanks that regularly receive fuel from tank trucks are the three USTs located at the Maintenance Complex Fueling Station and the three ASTs that support emergency generators at the Airport. The USTs at the Fueling Station are the only tanks that routinely need refilling (i.e., approximately once a month for the diesel tanks, and every two months for the gasoline tank). The tanks that support the emergency generators seldom need refilling. Prior to the filling of any Airport operated tanks, a trained Airport employee determines the amount of fuel needed in the tank using an automatic tank gauging system or a measuring stick.

In addition to fuel deliveries to the Airport by tank truck, authorized Airport personnel fill Airport vehicles with gasoline and diesel fuel via the dispenser pumps located at the Fueling Station. The Airport has implemented the following best management practices in regard to fueling activities to reduce the risk of a spill reaching the storm drainage system:

- The fuel pumps have been located in such a way that no pathway to a navigable waterway exists near the pumps;
- If a spill did reach the closest storm drain, which is located approximately 218 feet away, it would be routed to an oil/water separator where it could be captured and pumped out;
- The fuel pumps are located within a secure area;
- The Airport is staffed 24 hours a day, 365 days a year;
- The fuel dispensing area is lighted by a flood light at the Maintenance Facility;
- Fuel dispensing nozzles are equipped with automatic shut-off valves;
- Authorized personnel must document which vehicle receives fuel and the amount of fuel dispensed;
- Spill kits are located at the Operations/Maintenance Facility and the Airport Maintenance Annex, and are available to all personnel using the fuel pumps;
- The fuel pumps are located on an impermeable concrete pad; and
- All authorized personnel using the fuel pumps have direct contact with the Airport's ARFF department and spill response team, which is also located in the same building as the Operations/Maintenance personnel.

Recommended Fuel Transfer Procedures are summarized in Table 1–4.

Table 1–4. Recommended Fuel Transfer Procedures

Type of Transfer	Transfer Procedures
Fuel from tankers to the USTs at the Maintenance Area fueling station.	<ul style="list-style-type: none">• Check bill for proper fuel type• Ground tanker

Type of Transfer	Transfer Procedures
	<ul style="list-style-type: none"> • Visually inspect hoses for leaks • Verify that sufficient volume is available in tanks • Sample each chamber from which fuel will be pumped • Set pump to draw fuel from tanker • Driver must stay with truck during transfer • Clean filters in pump before accepting • Assure no smoking during transfer • Assure no other fueling during transfer • Monitor liquid level in tanks to avoid overfills • When transfer is complete, secure all hatches, drain hoses using drip pans, and disconnect ground
Used oil from vehicles during maintenance activities	<ul style="list-style-type: none"> • Use drip pans to prevent spills • Clean up incidental spills
Used oil from maintenance activities to temporary storage (drums, tanks, etc.)	<ul style="list-style-type: none"> • Don't overfill drip pans • Use funnel to effect transfer • Seal storage container after transfer • Clean up incidental spills

1.5.2 Additional Best Management Practices

Additional BMPs implemented by the Airport to minimize the risk of spills or other accidental releases of oil include:

Adequate Secondary Containment for Vehicles

The driver of the tank truck is responsible for providing secondary containment for the hose during all off-loading operations, as well as proper handling of any fuel that drains from the hose or connections during filling.

Warning or Barrier System for Vehicles

The driver of the tank truck is responsible for confirming that the truck's hose is disconnected from the tank prior to departing the off-loading area.

The driver of the tank truck is responsible for placing chocks under the truck's tires during off-loading operations. If the driver does not have chocks, a sign should be placed on the truck's driver-side seat as a reminder to disconnect from the tank prior to departure.

Vehicles Examined for Lowest Drainage Outlets before Leaving

The driver of the tank truck is responsible for examining the truck, the tank, and the off-loading area for leaks and spills prior to departing the area. An Airport Operations/Maintenance

representative is trained to look for any leaks or spills prior to the truck leaving the area. Any leakage is addressed, and drains are tightened, adjusted, or replaced if necessary to prevent liquid leakage while in transit. In addition, any spills are cleaned up prior to departure.

1.6 Spill History

For the purposes of the Airport's Oil Pollution Prevention Program, the Airport has incorporated the United States Environmental Protection Agency's (EPA) definition of a Spill Event.

Therefore, the Airport defines a Spill Event to be "a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities, such that applicable water quality standards are violated or that causes a film or sheen upon the water."

Given the EPA's definition of a Spill Event, the Airport has not experienced such a release from Airport operated facilities since 1994. However, Airport tenants have experienced such a release as recently as October 2003. The Airport's ARFF provides on-site spill response services at the Airport and maintains a database of all spills reported by Airport and tenant personnel. In particular, ARFF maintains a list of all spills that have occurred at the Airport for the past three years. See Appendix G for more information on the Airport's spill history. If a Spill Event occurs at an Airport-owned and operated facility, the spill history table in Appendix of this Plan will be updated to address such a release.

In addition, the Airport is also required to abide by NH Department of Environmental Service's (NHDES) regulations and definitions regarding petroleum releases. Any responsible party or other party having knowledge of a discharge of oil must report it to NHDES unless **ALL** the following conditions are met:

- The discharge is less than 25 gallons;
- The discharge is immediately contained;
- The discharge and/or contamination is completely removed within 24 hours; and
- There is no impact or potential impact to groundwater or surface water.

1.7 Airport Drainage and Proximity to Navigable Waterways

The Airport lies within the watershed of the Merrimack River and runoff from its storm water drainage system discharges to the river and three of its tributaries (see Airport Drainage Plans in Appendix D).

- The Merrimack River flows from north to south and is located approximately 0.1 miles from the Airport;
- Cohas Brook abuts Airport property to the north and flows generally from east to west, through Pine Island Pond to its confluence with the Merrimack River;
- Little Cohas Brook abuts the Airport property to the south and flows generally from east to west to its confluence with the Merrimack River; and

- South Perimeter Brook originates at the outfall from Airport Detention Basin #1 at the western edge of the Airport's property, then flows west/southwest to its confluence with Little Cohas Brook just east of old Brown Avenue.

Airport drainage and potential contaminant discharges to local receiving waters are addressed further in Section 3.1

1.8 Conformance with Applicable State and Local Requirements

The SPCC regulation 40 CFR part 112 is more stringent than requirements for the State of New Hampshire for this type of facility. This SPCC Plan was written to conform with 40 CFR part 112 requirements. The facility therefore conforms to general requirements for oil pollution facilities in the State. All discharge notifications are made in compliance with state and local requirements.

2 PART 2: SPILL RESPONSE AND REPORTING 40 CFR 112.7

2.1 Discharge Discovery and Reporting

Any Airport or tenant personnel who identify a release of petroleum product on Airport property is required to report the release to the Airport Communications Center immediately and the Airport Communications Center notifies ARFF. Whether or not the responding ARFF personnel will have the primary responsibility for containment and cleanup is contingent upon the size and location of the release, the training of the individual identifying the release, and the generator of the release. If a release results due to actions initiated by Airport tenants or other non-Airport personnel, it is the Airport's policy that the clean-up of such releases is the responsibility of the tenant.

If the release is caused by the actions of Airport personnel and if the individual or party who identifies the release has sufficient training and equipment for containing and cleaning up the release, then that individual will address the release. Those tenants that perform their own cleanup activities should report all airside spills to the Communications Center so that it can be documented by ARFF. The exception to this guidance is in the following situations:

- The release is greater than 25 gallons;
- The release cannot be immediately contained;
- It is believed within one hour after the spill that the release and/or associated contamination cannot be completely containerized within 24 hours; or
- There is an impact or potential impact to the Airport's storm drainage system, local surface water, or groundwater.

Federal regulations require that any spill must be reported to the US Environmental Protection Agency (EPA) if it has the potential to:

- "Violate applicable water quality standards, or
- Cause a film or sheen or discoloration of the water or adjoining shorelines, or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines." (40 CFR part 110).

If a release results in any of the above situations, the following activities must occur:

- The Airport Communications Center must be contacted immediately;
- The Airport Communications Center will notify the Response Coordinator, the Alternate Response Coordinator, or their designee;
- The ARFF will mobilize to the scene, stand by to monitor cleanup, and if necessary, will contain the spill to prevent an impact to storm drainage or surface waterways;
- The Response Coordinator or designee will contact the New Hampshire Department of Environmental Services (NHDES) and the US Environmental Protection Agency (EPA) at one of the numbers listed in Table 2-I.
- If the spill is greater than 25 gallons or enters the Airport's storm drainage system, a water body, or a wetland, the Response Coordinator or designee will contact the National Response Center Hotline;
- The responsible party and Response Coordinator or designee, in cooperation with the ARFF, will decide if an outside spill response contractor is required to address the spill; and
- Prepare all necessary reports upon containment and cleanup of the release.

The information that must be provided to NHDES and the National Response Center includes:

- The name and telephone number of the person providing the notice;
- The location of the discharge;
- The date and time of the discharge;
- The type, amount, and cause of petroleum product discharged; and
- The name, address, and telephone number of the party potentially responsible for the discharge.

An incident report form must also be completed and forwarded to NHDES Waste Management Division Spill Response & Complaint Investigation Section. A NHDES Incident Report Form is included in Appendix E.

If the individual or tenant facility that identifies the release does not have sufficient training and equipment for containing and cleaning up the release, then a spill contractor must be mobilized to the site for cleanup. ARFF will mobilize to the scene, stand by to monitor cleanup, and if necessary, will contain the spill to prevent an impact to storm drainage or surface waterways.

If the quantity of oil released exceeds the applicable Reportable Quantity under Section 304 of the Emergency Planning and Community Right-to-Know Act, the responding fire department will notify the Local Environmental Planning Committee (LEPC) and the State Fire Marshal's Office.

A written notification must be made to EPA, pursuant to the requirements at 40 CFR 112, for any single discharge of oil to a navigable water or adjoining shoreline of more than 1,000 gallons, or two or more discharges of at least 42 gallons of oil to a waterway in any 12-month period. This written notification is in addition to any requirements in 40 CFR 110 and must be made within 60 days of the qualifying discharge. A copy of the notification should also be sent to the NHDES.

Table 2–1 presents a list of emergency contacts; additional contact information is included in Table 2–2. Copies of Table 2–1 are posted adjacent to telephones in all applicable facilities at the Airport.

Table 2–1. Emergency Contacts

Contact	Telephone #	Circumstances
Airport Communications Center	(603) 624-6349 or (603) 628-6019	Any reportable release
Airport Emergency:	(603) 628-6222	As necessary
Facility Response Coordinator Thomas J. Malafronte	Office: (603) 624-6539 Mobile: (603) 365-7094	Any reportable release
Alternative Response Coordinator Luis Elguezabal	Office: (603) 624-6539 Mobile: (603) 851-1106	Any reportable release if response coordinator not available
ARFF Facility	(603) 624-1614	Any reportable release
Airport Operations/Maintenance	(603) 624-6592	
National Response Center	(800) 424-8802	Discharge reaching or threatening to reach navigable waters
EPA Region I Office	(617) 918-1111	Discharge reaching or threatening to reach navigable waters
EPA Region I c/o Regional Administrator 1 Congress St. Suite 1100 Boston, MA 02114-2023	(617) 918-1010	Written Notification w/in 60 days for discharge of 1,000 gallons or more, or a second discharge of 42 gallons or more occurring w/in a 12-month period
NH DES Office	Mon–Fri. 8 am–4 pm (603) 271-3899 Weekends & Evenings (603) 223-4381	Notify within 24-hours of the release of >25 gallons of regulated substance
Emergency Response/Clean-up Contractors CAB Services, Inc., Cyn Environmental	(800) 287-6355 (603) 749-4969	As determined by the Facility Response Coordinator to assist in the response and cleanup of discharges

Contact	Telephone #	Circumstances
Trauma Center Elliot Hospital One Elliot Way Manchester, NH	(603) 663-5300	Any incident that results in injuries requiring or potentially requiring medical attention

Table 2–2. Additional Contacts

Contact	Telephone No.
Airport Operations/Maintenance	(603) 624-6592
Air Traffic Control Tower (FAA)	(603) 669-4732
Airport Administrative Offices	(603) 624-6539
Londonderry Fire Department	911 or (603) 432-1124
Manchester Fire Department	(603) 669-2256
Londonderry Police Department	(603) 432-1118 (general)
Manchester Police Department:	911 or (603) 668-8711

In the case where a release of petroleum product is greater than the containment abilities of ARFF, the Airport has mutual aid agreements with both the Londonderry and Manchester Fire Departments to support containment activities. In addition, the Airport has access to off-site contractors as necessary. Table 2–3 presents the contractors used by the Airport to provide spill response activities on an as needed basis.

Table 2–3. Spill Response Contractors

Contractor	Phone Number
CAB Services, Inc. 72 Littleworth Road Dover, NH 03820-4331	(603) 749-6335 (800) 287-6355
Clean Harbors Environmental Services 20 Dunklee Road Bow, NH 03304	(603) 224-6626 (800) 645-8265
Cyn Environmental 8 Progress Drive Dover, NH 03820-5450	(603) 749-4969 (800) 242-6818

2.2 Spill Response Materials

Spill response materials are maintained at several locations at the Airport, including the Operations/Maintenance Building and the Terminal Building. The spill kit at the Operations/Maintenance Facility is a 65-gallon kit with the following supplies:

- Absorbent Pads;
- Pillows;

- Dikes/Socks;
- A Floor-Stand Spill Sign;
- Speedy-Dri;
- HazMat Disposal Bags;
- A Spill Response Pocket Guide;
- A Safety and Compliance Directory;
- A DOT Emergency Response Guidebook; and
- A DOT Label Package.

In addition, other equipment at the facility includes extra absorbent pads, emergency radios, telephones, an emergency contact list, drain covers, safety data sheets, drum labels, shovels, and disposal drums. Airport Operations/Maintenance personnel are responsible for replacing any items removed and/or used from any of the spill kits associated with Airport owned and operated bulk storage tanks.

ARFF is the primary spill response entity at the Airport. The ARFF department maintains sufficient spill response equipment to address spills that may occur at any facility on Airport property. In particular, ARFF maintains a spill response vehicle with the following items:

- Absorbent pads;
- Dikes;
- Booms;
- Speedy-Dri;
- Drain blocking pads (gel-filled);
- Drain covers;
- Diking materials to plug holes in tanks; and
- Disposal barrels.

Maintenance personnel have access to loaders, excavators, and an abundance of sand and other containment materials for the purpose of containing a spill.

2.3 Spill Mitigation Procedures

In addition to the proper notification procedures discussed above, employees are also required to initiate spill mitigation measures provided that such measures can be implemented safely, and they have been properly trained to do so. These measures include but are not limited to the following procedures.

2.3.1 Shut Off Ignition Sources

Potential ignition sources may include motors, electrical circuits, and/or open flames.

2.3.2 Stop Oil Flow

Personnel should determine the source of the discharge, and if safe to do so, immediately shut off the source. In the case of a discharge at the fuel farm, an emergency shut off switch is located outside the fence on the northerly side of the facility (see Photo # 9 in Appendix C).

2.3.3 Stop the Spread of Oil and Contact the Appropriate Persons

If safe to do so, personnel should use the materials provided on site and located in the spill kit to stop the spilled material from spreading. Measures that may be implemented, depending upon the location and volume of the discharge, include placing absorbent material or other barriers in the path of the discharge, constructing berms or trenches, and covering nearby storm drain catch basins with the covers supplied in the spill kits.

For small or incidental spills that pose no significant risk to human health or the environment, personnel should use on-site clean-up materials to collect the discharged material and place the material in an approved container. The Facility Response Coordinator should then be contacted regarding the appropriate method of disposal of the material.

In the event of a significant discharge, personnel must immediately contact the Facility Response Coordinator, who will initiate contact with the Airport's clean-up contractor and local emergency response personnel.

2.3.4 Gather Spill Information

For any significant spill, on-site personnel will collect pertinent information and complete a copy of the Discharge Notification Form found in Appendix E.

2.3.5 Notify Agencies

Notification of the applicable agencies described in Section 2.1 should be initiated in a timely fashion by the Facility Response Coordinator or his designee.

2.4 Disposal Plan

The Airport's Emergency Response/Clean-up Contractor will provide disposal services for any recovered product, contaminated soil, contaminated materials and equipment, decontamination solutions, absorbent materials, and/or spent chemicals collected during a response to a discharge incident, unless other arrangements are made by the Facility Response Coordinator.

Any recovered product that is suitable for recycling may, at the discretion of the Facility Response Coordinator, be so disposed.

3 PART 3: SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PROVISIONS (40 CFR 112.7 & 112.9)

3.1 Potential Discharge Volume and Direction of Flow

Discharges occurring at the Airport, if occurring in large enough quantities and in the absence of spill response actions, have the potential for reaching waters of the United States in proximity to the Airport including:

- Cohas Brook;
- Little Cohas Brook;
- Merrimack River;
- Pine Island Pond; and
- South Perimeter Brook.

Spills or other releases occurring in Airport buildings or on paved surfaces would either be contained within the building or enter the Airport's stormwater drainage system. This system is comprised of twenty-two sub-drainage basins (see Appendix D, Site Plan 1).

Table 3–1 presents predicted release scenarios for Airport-owned bulk petroleum storage tanks and portable containers. Included is the source, type of failure, volume of likely maximum release (gallons), rate of flow (gallons per hour), direction of flow, and outfall to which the release has the potential to discharge

Table 3–1. Potential Discharges and Direction of Flows

Source	Type of Failure	Volume (gal) ¹	Rate (gal/hr) ²	Direction of Flow	Outfall
Storage Tanks					
Airfield Electrical Vault - Diesel Fuel AST	Rupture, leakage, or overfill	2,000 ³	2,000	West	Outfall #9
Terminal Parking Garage - Diesel Fuel AST	Rupture, leakage, or overfill	700	700	South and west	Outfall #1
Maintenance Facility - ASTs	Rupture, leakage, or overfill	500	500	Within building ⁵	Outfall #9
Maintenance Facility Annex-AST	Rupture, leakage, or overfill	240	240	Within building	Outfall #9
Maintenance Complex Fueling Station Pumps	Spill, leakage, or overfill	3 x 12,000	240	Within building ⁴	Outfall #9
Terminal Building- Diesel Fuel	Rupture, leakage, or overfill	80	80	Within building ⁴	Outfall #19
Ammon Center - #2 Heating Oil UST/AST	Rupture, leakage, or overfill	10,000	2402	Westerly	Outfall #1 or #19

Source	Type of Failure	Volume (gal) ¹	Rate (gal/hr) ²	Direction of Flow	Outfall
Portable Storage Containers					
Maintenance Facility-Assorted Petroleum Products	Rupture, leakage, or overfill	55	55	Within building ⁵	Outfall #9
Truck Off-Loading Operations					
Tank Truck Off-Loading	Rupture, spill, piping failure, overfill	3,000	3,000	Southerly	Outfalls #1, #9, or #19

¹ Volumes represent a reasonable worst-case scenario,

² Flow rates represent a reasonable worst-case scenario.

³ This storage tank is double-walled and therefore containment would be the size of the inner tank plus the additional area of the outer containment.

⁴ Releases occurring within the buildings would be contained therein.

⁵ A release that reached floor drains would be routed to an oil/water separator.

3.1.1 Direction of Flow: Airfield Electrical Vault

All runoff from this area goes to a grassy area and nearby catch basins which drain to a wetland located south of the Operations/Maintenance Facility, and eventually to Outfall #9 and Cohas Brook

3.1.2 Direction of Flow: Maintenance Facility

Overland surface water flow from the Operations/Maintenance Facility discharges to catch basins in sub-drainage basin #9 or to wetland located south of the buildings, and eventually to Cohas Brook. However, all ASTs and portable containers associated with the Maintenance Facility are stored inside the building. All floor drains within the industrial portions of the Operations/Maintenance Facility discharge to an oil/water separator located south of the building. Therefore, any discharge associated with the ASTs or containers at the Facility would be contained within the building or contained by the oil/water separator. Floor drains located in the Annex Building are protected with magnetic drain covers and are also routed through an oil/water separator located south of the building.

Spills or other releases from Airport-owned vehicles may occur from overfills of fuel tanks; rupture of fuel tanks, fuel lines, crankcases, etc.; or releases related to vehicular accidents. Such releases would generally be small in nature and would be remediated by actions specified in Section 3.2.

Spill or other releases occurring at the Operations/Maintenance Facility Complex Fueling Station have the potential to flow to catch basins in sub-drainage basin #9 that discharges to Cohas Brook.

3.1.3 Direction of Flow: Terminal Building

The 80-gallon AST at the Airport Terminal Building is in a room without any drainage connections. Therefore, a discharge from the tank would be contained in the room and would not reach a navigable waterway.

The fill stand for the tank is on the outside wall of the Terminal Building. The filling area is concrete, and the closest storm drain is located approximately 200 feet to the west. The storm drain eventually leads to a 6,000-gallon oil/water separator. Therefore, if a release occurs during off-loading operations and reaches the storm drain, the oil/water separator would contain it. However, a release to this storm drain is unlikely since Airport personnel fill the 80-gallon day tank with a 100-gallon portable tank. Therefore, there is never more than 100 gallons of fuel at the loading area at any time. The oil/water separator to which the storm drain discharges is in sub-drainage basin #19 and is emptied on a regular basis, as needed, and the contents are properly disposed of by a licensed waste hauler.

Spills or other accidental releases of oil within the Terminal Building would generally be confined to the building and would not enter the Airport's stormwater drainage system. Floor drains at several locations in the Terminal Building discharge to the municipal sanitary sewer system.

Oil spilled or otherwise released in the tugway, gate areas, and/or parking aprons would have the potential to enter the Airport's stormwater drainage system (sub-drainage basin #19) and be directed through the oil/water separator cited above.

3.1.4 Direction of Flow: Airport Parking Garage

Storm drains in proximity to the Parking Garage emergency generator are located south and west of the tank along Airport Road; however, a potential release from the tank would be impeded from reaching the drains due to a grassed area that separates the tank from the drains.

The tank's off-loading area is located within the Parking Garage. All drainage within the Parking Garage is connected to an oil/water separator and the sanitary sewer system. Therefore, any potential release from the vehicle during off-loading activities would be contained.

3.1.5 Direction of Flow-Ammon Center

The 10,000-gallon #2 heating oil UST is located on the westerly side of the building. The fill stand for the tank is located at ground level on the westerly side (front) of the building. The fill stand is located within a landscaped section of the building and is locked except during filling. There are no storm drains in proximity to the fill area. The tank is equipped with a Veeder Root monitoring and alarm system and instructions are posted for tenants to follow in the event of an incident with the tank.

3.1.6 Direction of Flow: Former Wiggins Hangars

The two former Wiggins hangars used by the Airport for inside storage of vehicles and maintenance of shuttle buses have been removed as part of an Airport improvement project. The new multi-tenant cargo facility that will be constructed in its place, will be incorporated into this SPCC Plan.

3.1.7 Direction of Flow: Sand Storage Building

In the unlikely event of a significant spill or other release of oil at the Sand Storage Facility, flow from the site would be over a grassed area towards South Perimeter Brook.

3.1.8 Direction of Flow: MHT Hex Hangars

Since the MHT Hex Hangars are used for inside storage and limited maintenance of aircraft, spills or other accidental releases of oil would likely be confined to the buildings. Floor drains in the hangars discharge to the municipal sanitary sewer. In the unlikely event that a significant release occurred outside the buildings, flow from the northernmost building area would enter stormwater sub-basin #19 and pass through an oil/water separator prior to discharging to the Merrimack River.

3.1.9 Direction of Flow: Pro Star Aviation – T-Building

This building is currently leased to Pro Star Aviation, who, by contract are required to abide by all local, state, and federal environmental regulation. Furthermore, in the unlikely event of a significant spill or other release of oil from the building, the flow of from the site would potentially enter the Airport's stormwater drainage sub-basin #17 and potentially discharge to Little Cohas Brook.

3.2 Release Containment

As the Owner/Operator of the facility, the Airport is responsible for providing sufficient secondary containment at each area where they conduct operations, and where regulated substances are stored, to prevent harm to human health or the environment in the event of a release. Secondary containment must be designed to address the most likely discharge from tanks, drums, or other primary containment systems so that any discharge that occurs will not escape containment before cleanup occurs.

3.2.1 Drainage Control, Diversionary Structures, and Containment

At the Airport, all aboveground bulk storage tanks have secondary containment. All underground bulk storage tanks at the Airport have a leak detection system.

Airport personnel, as well as multiple tenants, routinely handle petroleum products and hazardous materials in sub-drainage area #19. This drainage area includes portions of the Airport where deicing and fueling of commercial aircraft occurs. To prevent a potential release of petroleum products or hazardous materials to the Little Cohas Brook, the Airport has installed a secondary containment system for the entire drainage area.

Electrically operated sluice gates, equipped with a manual backup device, are installed within the drainage system upstream of the detention basin to which the sub-drainage basin culvert discharges. A 6,000-gallon oil/water separator is installed directly downstream of the sluice gates prior to the outfall. There are also three oil/water separators connected to the drainage from the Maintenance Facility.

Airport personnel examine the sluice gates monthly and the oil/water separators as necessary. A contractor empties the holding tank associated with the oil water/separators when necessary, and the waste is disposed of in a manner consistent with all applicable regulations. The oil/water separator upstream of the detention basin is monitored by an automatic leak detection system and equipped with an overfill alarm. In the event of a malfunction, Airport personnel are notified of the release through the automatic system. The oil water/separator discharges to the detention basin located downstream and prior to the outfall. The detention basin's outlet may be manually sealed to prevent a discharge to the Merrimack River and/or Little Cohas Brook.

With the use of the sluice gates prior to the detention basin and the use of drain plugs in individual storm drains, the Airport can contain a petroleum release prior to it reaching a navigable waterway by closing off the system either partially or completely.

3.2.2 Drainage Control

Drainage from Diked Storage Areas

The Airport does not have any diked petroleum storage areas that are exposed to rain or snow. All tanks are double-walled without bermed secondary containment, and/or are located indoors.

Facility Drainage Systems from Undiked Areas

The only undiked system at the Airport that is not located inside a building is the double-walled 1,800-gallon diesel fuel AST associated with the Airfield Lighting Vault. This AST is a shop manufactured double walled tank.

Final Discharge of Drainage

As described in Section 3.2.1, sluice gates, an oil/water separator, and a detention basin provide protection against a release to navigable waters for areas that drain to Outfalls #12 and #19.

All Airport owned and operated bulk storage petroleum units are in areas that drain to Outfalls #1, #12, #19, and #9. An oil trap with a 6-inch discharge opening is in the last storm drain before Outfall #1. Outfall #1 is adjacent to a constructed detention basin, which can accommodate large spills. This basin is effective in containing and controlling spills during dry weather. During wet periods, alternate methods of containing spills are implemented by using floating booms and other best management practices.

Facility Drainage Systems and Equipment

As described above, the Airport has an extensive stormwater drainage system equipped with multiple detention basins, sluice gates, and oil/water separators. The system allows for Airport personnel to contain a potential petroleum release within the system prior to it discharging to a navigable waterway.

3.2.3 Bulk Storage Tanks/Secondary Containment

The Airport does not own or operate any outdoor diked AST storage areas, buried metallic USTs, partially buried USTs, or tanks with internal heating coils.

Tank Compatibility with its Contents

All Airport-owned and operated bulk storage tanks are compatible with their contents.

Tank Installation Fail-Safe Engineered

Table 3–2 presents the fail-safe mechanisms for each tank at the Airport.

Table 3–2. Fail-safe Mechanisms for Bulk Storage Tanks

Tank Location/Size/Contents	Safety Mechanisms
Aboveground Storage Tanks	
Airfield Lighting Vault: 2,000-gallon diesel fuel AST	<ul style="list-style-type: none"> • Double-walled tank • Overfill sensor with visual and audible alarm • Overfill prevention valve • Spill containment manhole • Interstitial leak sensor with alarm • Piping sump sensor • Veeder-Root Guardian AST monitoring system • Anti-siphon valve with locked fillstand • Suction piping system • Double-walled piping with containment sump • Containment sump sensor with alarm • Dedicated electric circuit with backup battery for continued operations • Cement off-loading pad with ballast
Airfield Lighting Vault: 159-gallon diesel fuel AST	<ul style="list-style-type: none"> • Double-walled tank • Low-rupture alarm • Overflow collection sump
Parking Garage: 700-gallon diesel fuel AST	<ul style="list-style-type: none"> • Double-walled tank equipped with rupture basin • Overfill sensor with visual and audible alarm • Overfill prevention valve • Anti-siphon valve with locked fillstand • Contained off-loading area equipped with an oil/water separator • Contained within a housing out of contact with stormwater • On-site spill kit

Tank Location/Size/Contents	Safety Mechanisms
Airport Terminal Building: 80-gallon diesel fuel AST	<ul style="list-style-type: none"> • Located inside terminal building • Double-walled tank • Impermeable off-loading area • Nearest drain discharges to an oil/water separator • On-site spill kit
Operations/Maintenance Facility: 500-gallon motor oil ASTs	<ul style="list-style-type: none"> • Double-walled tank • Level tank gauge • Overfill tank gauge and alarm • Interstitial tank gauge • Located inside new building • Nearest floor drain discharges to an oil/water separator and the municipal sanitary sewer system
Maintenance Facility Annex: 240-gallon diesel fuel AST	<ul style="list-style-type: none"> • Located inside Maintenance Facility Annex • Single-walled tank w/ secondary containment structure • Impermeable off-loading area • Nearest drain discharges to an oil/water separator
Underground Storage Tanks	
Ammon Center: 10,000-gallon #2 Heating Oil	<ul style="list-style-type: none"> • Veeder Root Monitoring and Alarm System • Double-walled tank • Overfill protection • 5-gallon spill containment
Maintenance Facility: 2x12,000-gallon diesel fuel	<ul style="list-style-type: none"> • Fiberglass tank • Five-gallon spill bucket • Overfill protection valve • Double-walled piping • Tank sump with sensor • Suction piping with check valve at dispenser • Dispenser sump with slope-to-tank sensor • High-level audible and visual alarms • Veeder-Root TLS-300C monitoring system • Nightly leak detection test • Dedicated electric circuit with backup generator for the Veeder- Root monitoring system • Dispenser shut off switches • Spill kit provided at landside fuel pump
Maintenance Facility: 12,000-gallon gasoline	<ul style="list-style-type: none"> • Fiberglass tank • Five-gallon spill bucket • Overfill protection valve • Double-walled piping • Tank sump with sensor • Suction piping with check valve at dispenser • Dispenser sump with slope-to-tank sensor • High-level audible and visual alarms

Tank Location/Size/Contents	Safety Mechanisms
	<ul style="list-style-type: none"> • Veeder-Root TLS-300C monitoring system • Nightly leak detection test • Dedicated electric circuit with backup generator for the Veeder- Root monitoring system • Dispenser shut off switches

Observation of Disposal Facilities for Effluent Discharge

Operations/Maintenance personnel monitor the oil/water separators. In addition, since the Airport is staffed continuously, most swales, detention basins, and outfalls associated with the Airport's stormwater drainage system are observed daily by both Airport and tenant personnel. A contractor removes oil collected in the oil/water separators or in any other part of the drainage system. If any part of the drainage system (e.g., the oil/water separators or the sluice gates) malfunctions, it is shut down and Operations/Maintenance personnel or a contractor repairs the component. If oil is observed in the portion of the system that has malfunctioned, a contractor is hired to remove the oil from the drainage system.

Correction of Visible Oil Leaks from Tank Seams and Gaskets

During monthly and routine inspections of the Airport's bulk ASTs, tank seams and gaskets are inspected for visible oil leaks. Identified leaks are reported to Airport Operations/Maintenance immediately and repaired as soon as practicable. Measures are taken to minimize and mitigate the leak while awaiting repair. Any significant leak is reported to ARFF, and ARFF or Maintenance personnel clean up any spilled oil immediately. Additionally, Airport and/or tenant personnel also observe most tanks at the Airport daily. Any significant leaks observed by Airport or tenant personnel are immediately reported to the Airport Communications Center who notifies ARFF and/or Operations/Maintenance personnel.

Appropriate Position of Mobile or Portable Oil Storage Tanks

All portable oil storage containers are located inside the Airport Operations/Maintenance Facility or the Airport Maintenance Annex. Best management practices are routinely used in association with storage of these containers. For example, most containers in the Facility are stored within secondary containment (Appendix C, Photograph #12). If a release from a container were to reach the floor drains in the Facility, it would be routed to an oil/water separator. All containers stored in the Maintenance Annex are in flammable storage cabinets with leak proof 2-inch doorsills; the floor drains inside the building are protected with magnetic drain covers and are also routed to an oil/water separator.

3.2.4 Site Security Fencing

An eight-foot-high security fence surrounds the airside operations area (Appendix C, Photograph #13), and only Airport authorized or escorted personnel are allowed into the airfield area. Prior to being authorized by the Airport, all personnel are fingerprinted for a background security check and attend on site security training. In addition, all personnel on the airfield have authorized security identification badges. All Airport and tenant personnel are trained to report any unauthorized personnel to the Airport Communications Center.

Except for the AST at the Parking Garage and the heating oil tank at the Ammon Center, all Airport-owned and operated bulk storage tanks are located within the secured airfield. The Parking Garage AST is in a locked housing, and the fill stand is also locked. The Ammon Center AST is in the locked basement of the building and the fill stand is also locked.

Emergency Shut-Off

The Maintenance Complex Fueling Station has an emergency shut-off (Appendix C, Photograph #14).

Flow Valves Locked

All flow valves associated with Airport-owned or operated ASTs are either locked and/or located within the Airport's secured airfield.

Starter Controls Locked

All starter controls associated with Airport-owned or operated ASTs are either locked and/or located within the Airport's secured airfield.

Pipeline Loading/Unloading Connections Securely Capped

This section does not apply to the Airport; there are no buried liquid petroleum pipelines on Airport property. All Airport-owned and operated underground piping associated with the USTs located at the Operations/Maintenance Facility and the Airfield Lighting Vault are located within the secured airfield.

Lighting Adequate to Detect Spills

Lights illuminate the Operations/Maintenance Facility and the Airfield Lighting Vault. Lighting is adequate at all Airport operated bulk storage tanks to detect releases and prevent vandalism during nighttime hours.

3.3 Inspections, Tests, and Records

In accordance with New Hampshire State Regulations, Airport personnel inspect all aboveground and underground bulk storage tanks monthly. Appendix E presents the checklist used during the inspection. Completed checklists are maintained in the Airport Administrative Offices and are maintained for a minimum of three years. The USTs located at the Operations/Maintenance Facility, the UST located at the Ammon Center, the 2,000-gallon Airfield Lighting Vault AST, and the oil/water separators are leak-detected daily by automatic tank gauging systems; Airport personnel review the results of the leak detection systems daily, except readouts from the Ammon Center. Furthermore, all Airport-owned and operated bulk storage tanks and all portable containers, are observed daily.

All printouts from the automatic tank gauging systems and inventory monitoring reports associated with the USTs at the Operations/Maintenance Facility are maintained at the Operations/Maintenance Facility for a minimum of three years, in accordance with NHDES requirements. All printouts from the automatic tank gauging systems and inventory monitoring

reports associated with the UST at the Ammon Center are also maintained by the Airport for a minimum of three years, in accordance with NHDES requirements.

State guidance documents outlining procedures for inspecting the facility's UST and AST equipment in accordance with SPCC requirements are included in Appendix E.

Regular examinations are conducted at least monthly at the Maintenance Complex Fueling Station, and the Operations/Maintenance Facility by Airport personnel as required by New Hampshire Code of Administrative Rules found at Chapters Env-Or 300 and Env-Or 400 Petroleum Storage Facilities. At a minimum, these inspections should consist of a walkthrough of the facility and a check of the condition of all valves, fittings, hoses, pumps, and gauges, as well as the condition of the used fuel containers and their secondary containment. All inspections should be documented by filling out a copy of the Monthly Inspection Checklist that is included in Appendix E.

In accordance with New Hampshire State Regulations, Airport personnel routinely inspect all Airport owned and operated ASTs. Appendix E presents an example of the inspection checklist used by Airport personnel.

3.4 Brittle Fracture Evaluation

40 CFR 112.7(i) requires periodic brittle fracture evaluations for all field erected bulk storage containers. Currently there are no such containers at the Airport, therefore the requirement does not apply.

3.5 Personnel Training and Spill Prevention Briefings

All Operations/Maintenance personnel receive annual SPCC training as part of their annual SWPPP training. During the training, the Airport's standard operating procedures are reviewed and relevant topics are discussed. Also, this training includes the operation and maintenance of petroleum-containing equipment, the Airport's spill reporting and response procedures, fuel off-loading, and vehicle and filling operations.

ARFF personnel are responsible for responding to all oil spill containment and clean-up operations at the Airport. By virtue of being firefighters, all ARFF personnel receive Operational Level Responder Training, and are qualified in accordance with federal, state, and local rules and regulations for spill containment and clean up. The Airport ARFF department is required to have properly trained spill response personnel at the station at all times. Refresher training is conducted semiannually, and records are maintained by the ARFF office. SWPPP/SPCC training records are maintained and amended to the SPCC plan. An example of the training record form is included in Appendix G.

The Deputy Airport Director is the designated person accountable for spill prevention and response at the Airport. In the event that the Deputy Airport Director is unavailable, the Assistant Airport Director for Operations and Facilities becomes the primary contact.

Spill prevention briefings are conducted for Airport personnel, as necessary. Briefings are held to review a spill event or system failure, malfunctioning components, or recently developed precautionary measures. In addition, any narrowly prevented releases or incidents are discussed in these briefings to prevent a recurrence. Employee feedback and recommendations are encouraged during the briefings, as well as throughout the Airport's spill prevention program. Sign-in sheets, which include topics of discussion at each meeting, are maintained for documentation.

ARFF personnel perform an internal critique and briefing after every spill response event. The briefing informs all ARFF personnel of activities that led up to the spill, and the methods used to contain the spill. Information regarding the spill is documented in the ARFF logbook, and a final report is submitted to the Deputy Airport Director and Assistant Airport Director for Operations and Facilities.

As required by the Federal Energy Policy Act, NHDES has developed training guidelines for three classes of UST facility operators who operate and maintain federally regulated UST systems. The Maintenance Complex Fueling Station is so regulated by virtue of its storage capacity and contents. State regulations (RSA 146-C:17-21) require that all regulated facilities in New Hampshire have designated Class A, B, and C operators who have been trained and certified in accordance with an approved training program on or before August 8, 2012. Designated airport maintenance staff members have received the required training to achieve and maintain compliance with the applicable regulations.

Appendix A: Certification of Substantial Harm Determination (40 CFR 112.20(e), 40 CFR 112.20(f)(1))

Facility Name: Manchester-Boston Regional Airport

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage greater than or equal to 42,000 gallons?
Yes ☐ No ☒
2. Does the facility have a total oil storage capacity of greater or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus freeboard to allow for precipitation within any aboveground storage area?
Yes ☐ No ☒
3. Does the facility have a total oil storage capacity of greater or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula) such that a discharge from the facility could cause injury to fish and wildlife and/or sensitive environments?
Yes ☐ No ☒
4. Does the facility have a total oil storage capacity of greater or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula) such that a discharge from the facility would shut down a public water intake?
Yes ☐ No ☒
5. Does the facility have a total oil storage capacity of greater or equal to 1 million gallons and has the facility experienced a reportable spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
Yes ☐ No ☒

Certification

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

Signature:

Title: Deputy Airport Director

Name: Thomas J. Malafronte

Date:

Appendix B: Tenants at Manchester-Boston Regional Airport with Petroleum Storage Activities

Manchester-Boston Regional Airport leases property to multiple tenants who perform a variety of commercial and industrial activities on Airport property. Through the Airport/tenant lease agreements, tenants are responsible for meeting all regulatory environmental requirements applicable to their operations. Included in these responsibilities is the implementation of the federal and state Oil Pollution Prevention Programs.

This Appendix lists and describes tenants at the Airport that must prepare and maintain an SPCC Plan, as well as meet the operational requirements of the Oil Pollution Prevention Program under the Clean Water Act, as defined by 40 CFR 112. The threshold for having to meet the federal requirements is having an AST capacity greater than 1,320 gallons. The threshold capacity for USTs is greater than 42,000 gallons. USTs are exempt from SPCC regulations if they comply with all UST rules, 40 CFR part 280 or 281. Any container 55 gallons or greater of a petroleum product must be counted in a tenant's total storage capacity.

In addition to the tenants that must meet the Oil Pollution Prevention requirements of the Clean Water Act, this Appendix also presents a list of tenants that manage and store petroleum products at their facility. This list is not exhaustive; however, it does give a cross section of the tenants on Airport property that operate bulk storage tanks. Additional information regarding petroleum storage at Airport tenant facilities may be found in the Airport's Multi-Sector General Permit Storm Water Pollution Prevention Plan, which is maintained at the Airport administration office located at One Airport Road, Suite 300, Manchester, NH.

SPCC REGULATED TENANTS

Federal Aviation Administration

The Federal Aviation Administration (FAA) owns and operates a registered, 3,000-gallon diesel fuel AST at the Airport (NHDES Facility #0000290) that supports the FAA's Air Traffic Control Tower. FAA also owns and maintains an emergency generator diesel fuel AST of unknown volume at their facility near the southern end of Runway 17/35.

Freundenberg, NOK

Freundenberg, NOK is an industrial facility that leases property at 50 Ammon Drive from the Airport. Freundenberg maintains five ASTs (NHDES Facility #0000259):

- Two 390-Gallon diesel fuel tanks;
- Two 220-gallon hydraulic oil tanks; and
- One 330-gallon hydraulic oil tank.

They also have several 55-gallon drums of oil-related fluids and numerous smaller, non- SPCC regulated containers of oil.

Quick Turn Around Facility

The Quick Turn-Around Facility is collectively owned and operated by Avis, National and Budget car rental agencies, and maintains its own SPCC Plan. On-site activities include fueling, vehicle preparation (e.g., addition of fluids and oil) and vehicle washing. A 6,000-gallon AST containing gasoline located on the site is divided into three 2,000- gallon compartments. The tank is jointly registered to the three corporations as NHDES Facility #0000071, #0000072, and 0000073, respectively. In addition, each company is responsible for a 120-gallon virgin motor oil AST in above ground storage.

Signature Flight Support

In 2014, Signature Flight Support (Signature) acquired Wiggins Airways, the Airport's Fixed Based Operator, and now provides maintenance, deicing, and fueling services to the majority of commercial and general aviation operations at the Airport. Signature's bulk petroleum storage facility, completed in the spring of 2004 is located on Galaxy Way off South Perimeter Road. The facility has two 271,462-gallon ASTs that store Jet A fuel for commercial aircraft fueling. Each tank is equipped with leak detection cathodic protection, spill prevention, and full containment. A 20,000-gallon oil/water separator is available to aid in spill containment. Three 12,000-gallon ASTs were relocated from the former Wiggins Green Drive facility to this new facility. These tanks hold diesel fuel, 110 octane low-lead aviation fuel and propylene glycol aircraft deicing fluid. The facility also has a 2,000-gallon UST that is used to store water condensate from filtered jet fuel. The facility also has a 300-gallon lubricating oil tank, a 350-gallon used oil tank, and a 500- gallon tank that supplies diesel fuel to an emergency generator

A bulk storage facility at Signature's 1 Garside Way facility consists of two ASTs, a 10,000-gallon tank and a 12,000-gallon tank, both storing 100 octane low-lead aviation fuel.

NON-SPCC-REGULATED TENANTS

FedEx

FedEx has a used oil storage area at their 28 South Perimeter Road facility. In addition, they maintain several non-SPCC regulated portable storage containers.

Hertz

Hertz owns and operates an automobile rental facility at 830 Perimeter Road. Hertz formerly maintained a 5,000-gallon gasoline AST which was used to refuel vehicles. This tank was permanently closed in 2008. Therefore, Hertz is no longer required to maintain an SPCC plan. Currently, Hertz maintains a 10,000-gallon gasoline AST, 280-gallon used oil AST, and a 250-gallon motor oil AST, as well as smaller containers of automotive oils and maintenance fluids.

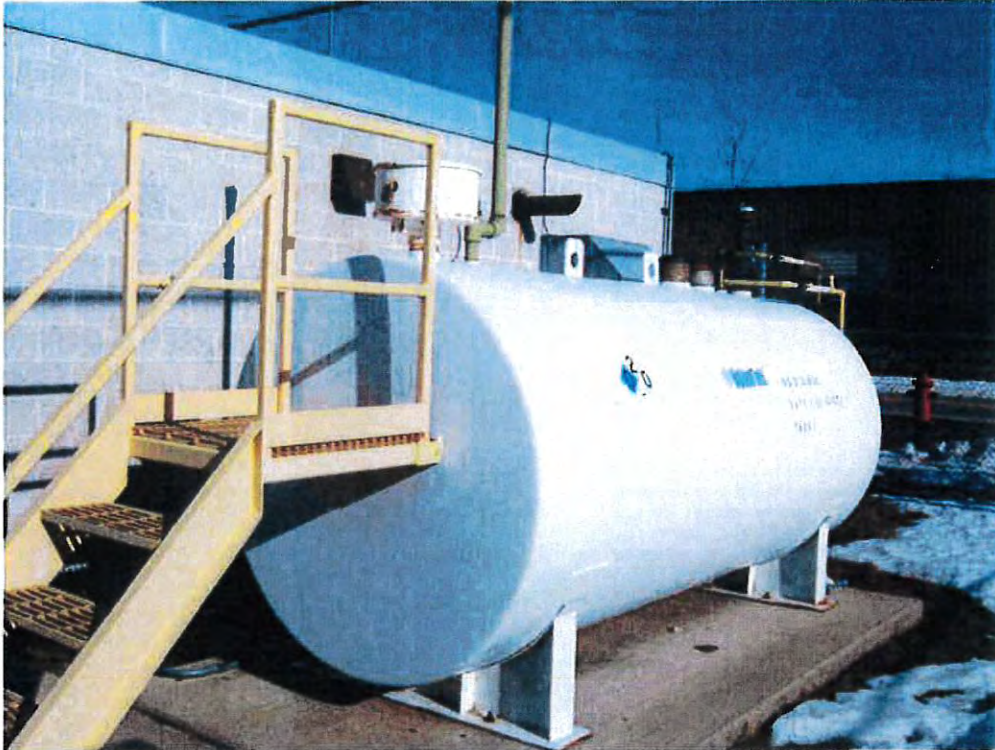
Aviation Associates

Aviation Associates owns and maintains a 250-gallon used oil AST and has several portable storage containers stored within their building.

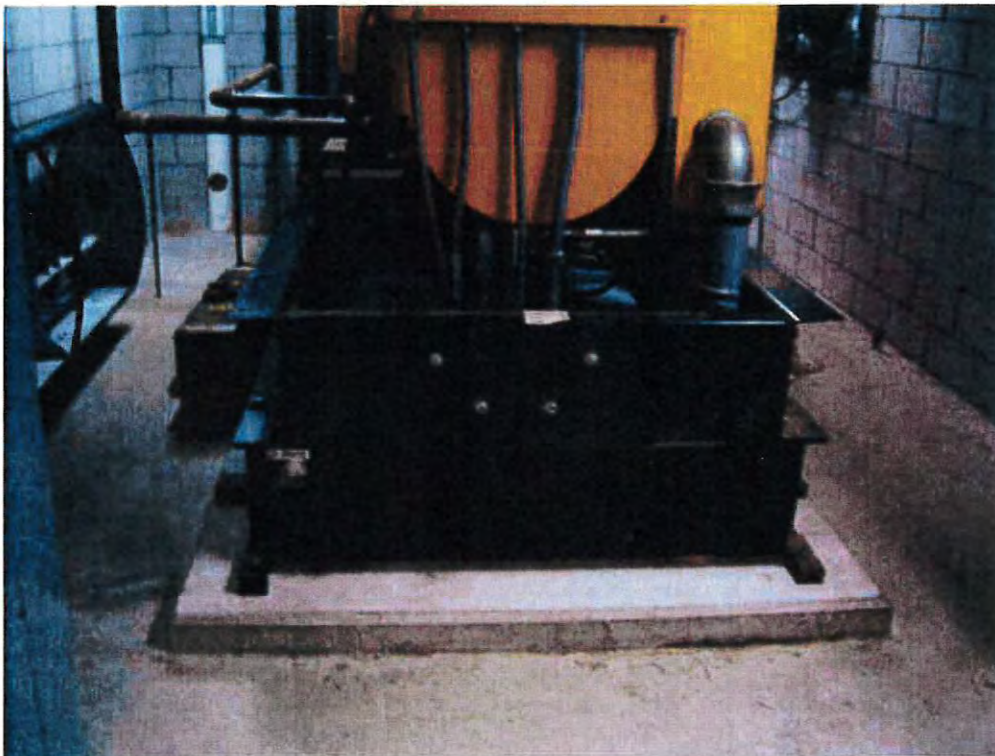
United Parcel Service

United Parcel Service owns and operates one 275-gallon split AST of oil (one side contains 137.5 gallons of used oil the other side contains 137.5 gallons of virgin oil). UPS also stores two 55-gallon drums of hydraulic fluid and miscellaneous portable storage containers in their maintenance facility.

Appendix C: Photographic Log



Photograph # 1 – Electrical Vault Emergency Generator Tank



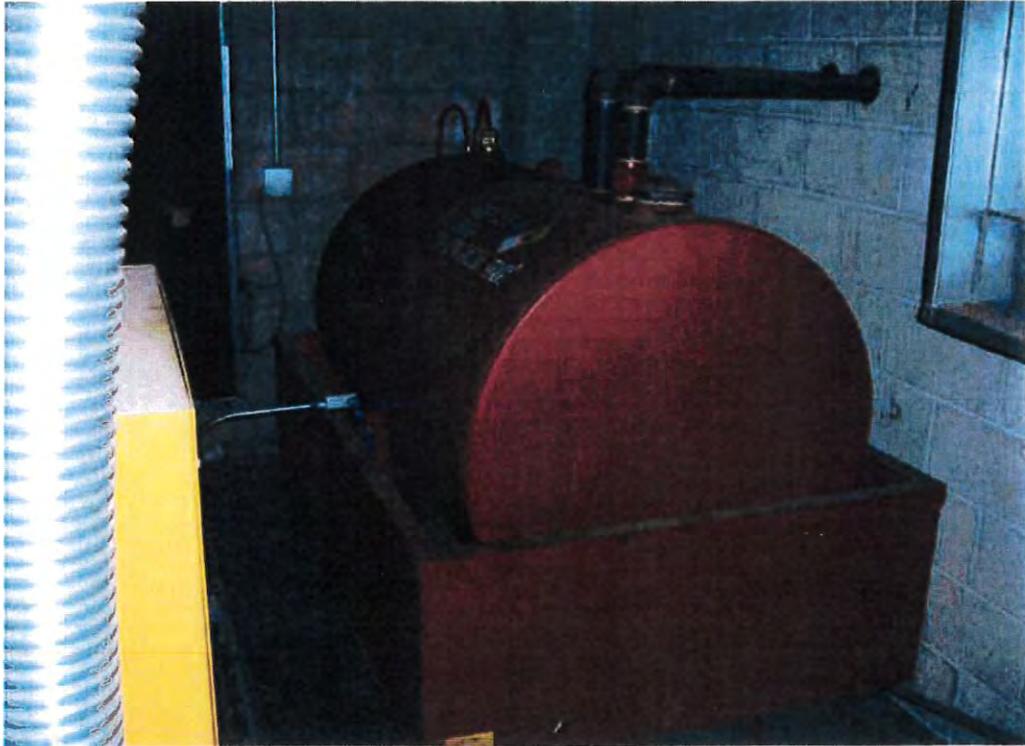
Photograph #2 - Electrical Vault Emergency Generator



Photo #3 – Maintenance Building Used Oil Tank & Drums



Photo #4 –Maintenance Building Oil Storage ASTs



Photograph #5 – Maintenance Facility Annex Fuel Tank



Photograph #6 – Maintenance Complex Fueling Station



Photograph #7 – Terminal Building Generator Fuel Tank



Photo #8 – Parking Garage Emergency Generator Tanks & Fill Pipe

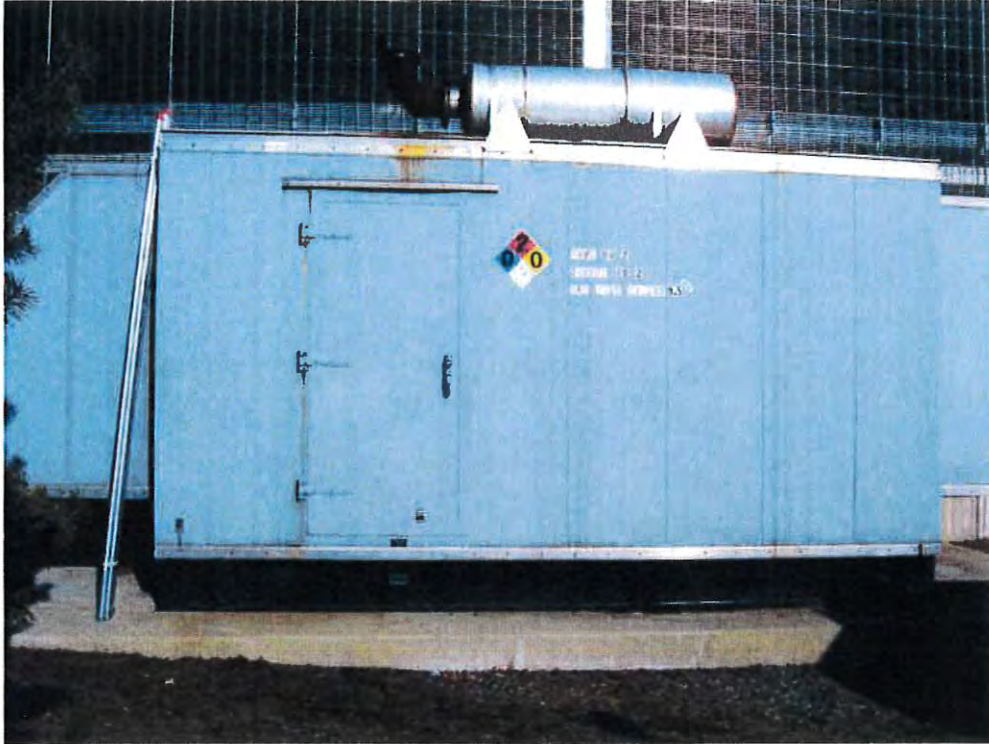


Photo #9 – Parking Garage Emergency Generator



Photograph #10 – Ammon Center UST Access



Photograph #11 – Sand Storage Facility



Photograph #12 – Container Secondary Containment



Photograph # 13 – Security Fencing



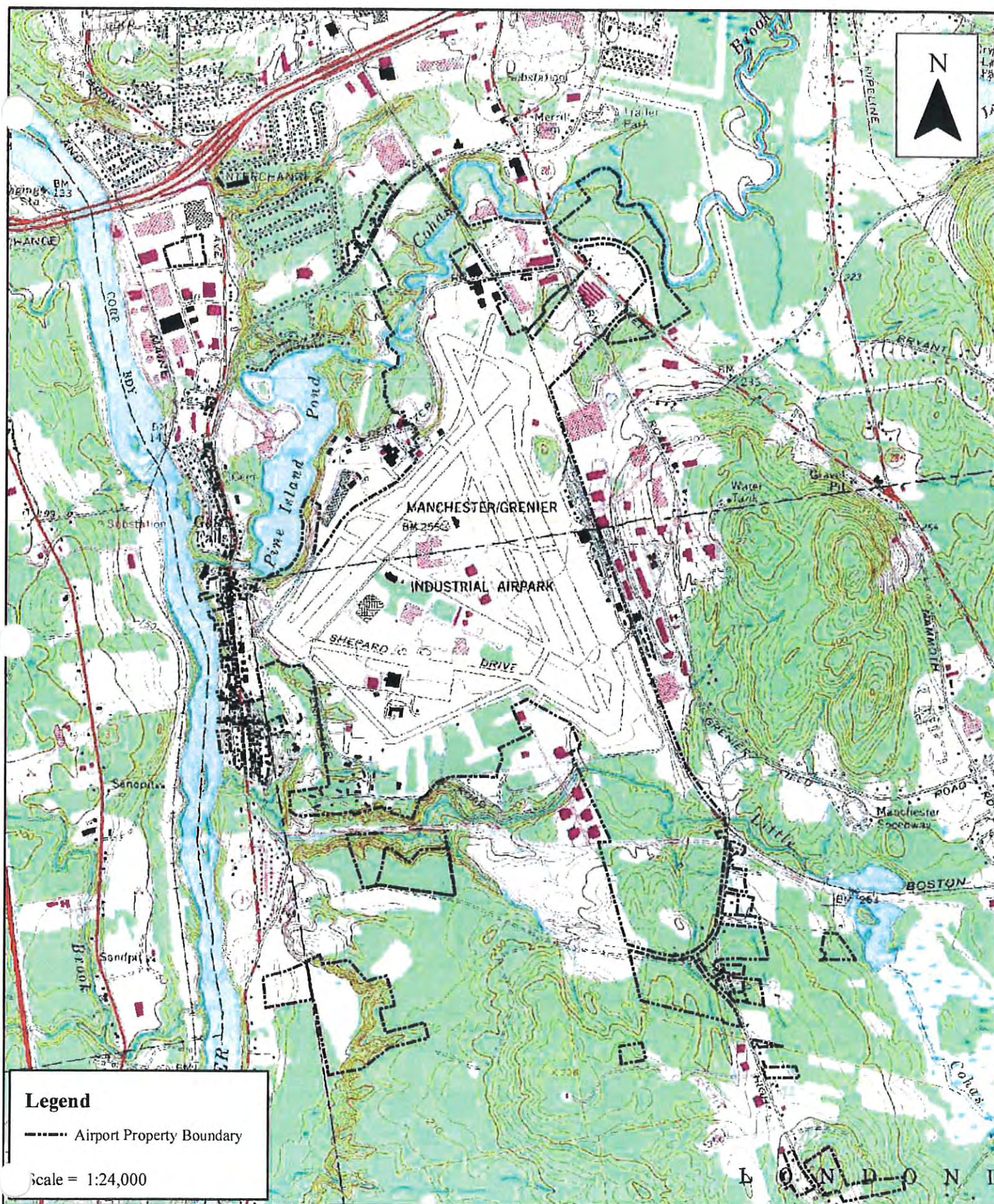
Photograph #14 – Maintenance Complex Fueling Station Emergency Shut-off

Appendix D: Figures



Figure 1
General Location Map

0 1,000 2,000 Feet





REV	DATE	REVISIONS	BY
		DESCRIPTION	
1	9/18/09	REVISED OUTFALL AREAS, 8 & 19 BY MCFARLAND JOHNSON	TED
2	5/03	ADDED DATA AND UPDATED DATES 1, 4, AND 9 FROM AS-BUILT PLANS BY CLD	--
3	7/21/09	REVISED MHT-DRAINAGE-MPU BY CLD	DAW

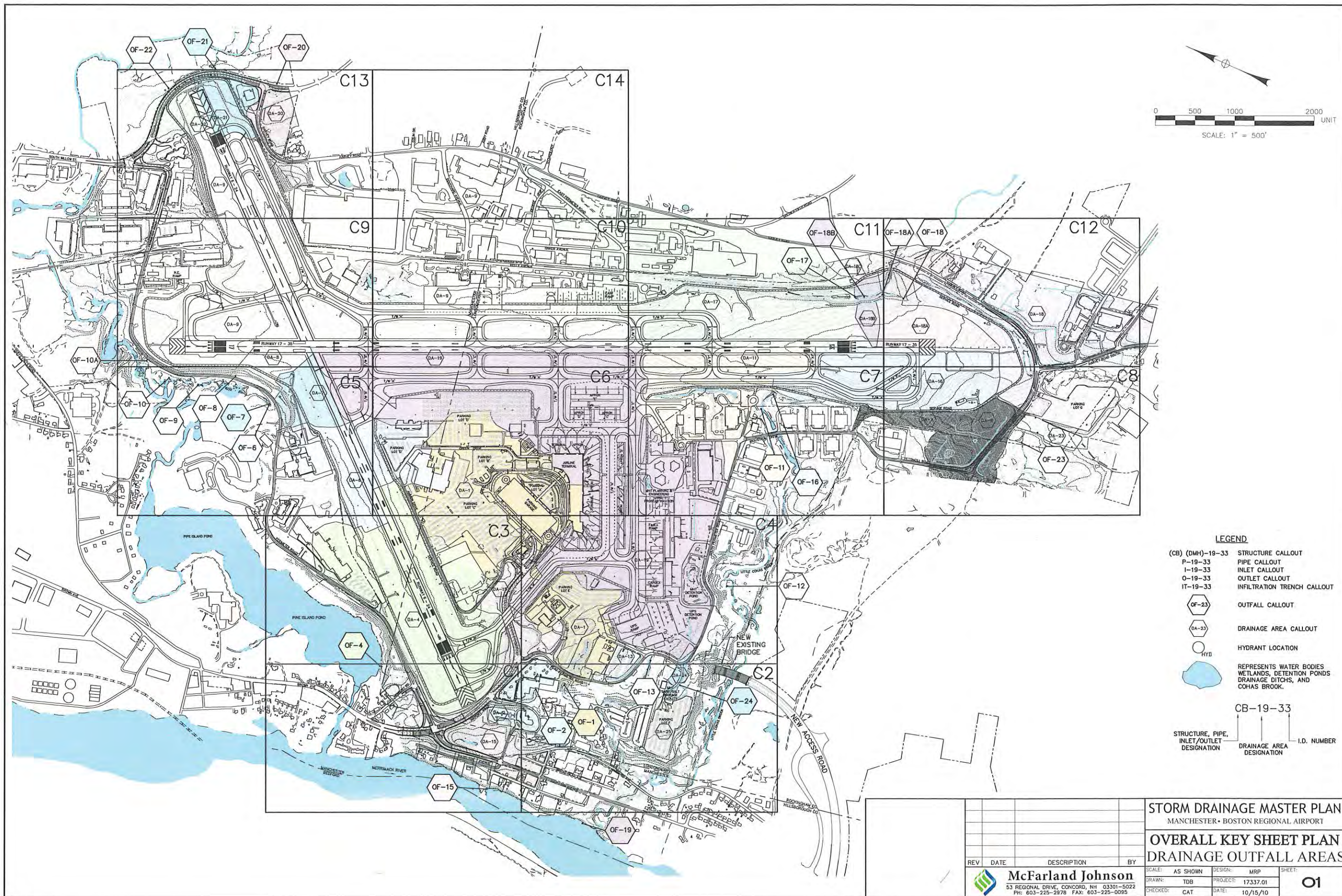


Manchester-Boston
REGIONAL AIRPORT

**CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE**



McFarland Johnson
 53 REGIONAL DRIVE, CONCORD, NH 03301-5022
 PH: 603-225-2978 FAX: 603-225-1095



- LEGEND**
- (CB) (DMH)-19-33 STRUCTURE CALLOUT
P-19-33 PIPE CALLOUT
I-19-33 INLET CALLOUT
O-19-33 OUTLET CALLOUT
IT-19-33 INFILTRATION TRENCH CALLOUT
- OF-23 OUTFALL CALLOUT
DA-23 DRAINAGE AREA CALLOUT
HYD HYDRANT LOCATION
- REPRESENTS WATER BODIES
WETLANDS, DETENTION PONDS
DRAINAGE DITCHES, AND
COHAS BROOK.
- CB-19-33
STRUCTURE, PIPE,
INLET/OUTLET
DESIGNATION
DRAINAGE AREA
DESIGNATION
I.D. NUMBER

STORM DRAINAGE MASTER PLAN			
MANCHESTER-BOSTON REGIONAL AIRPORT			
OVERALL KEY SHEET PLAN			
DRAINAGE OUTFALL AREAS			
REV	DATE	DESCRIPTION	BY
McFarland Johnson			
53 REGIONAL DRIVE, CONCORD, NH 03301-5022			
PH: 603-225-2878 FAX: 603-225-0055			
SCALE:	AS SHOWN	DESIGN:	MRP
DRAWN:	TDB	PROJECT:	17337.01
CHECKED:	CAT	DATE:	10/15/10
			SHEET: 01

Appendix E: Facility Compliance Guidance and Inspection Forms



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: **80 Gal**
LOCATION: **West Terminal**

DATE:
INSPECTOR:

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA				
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>		
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Level of standing water in dikes	none <input type="checkbox"/>	in <input type="checkbox"/>		
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of piping: corrosion	<input type="checkbox"/>	<input type="checkbox"/>		
paint	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
paint	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Check for <u>water</u> level in tanks	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Leak detection equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Stained concrete/wood/gravel	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drainage unimpeded	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grounding clamps and cables condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Electrical equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Fire extinguishers in place	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Remote shut down devices	yes <input type="checkbox"/>	no <input type="checkbox"/>		
No smoking signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Engine off signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of signage	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____

Leaks from generator? Yes ___ No ___ Comments _____

Proposed Corrective Action _____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: 700 gal		DATE:	
LOCATION: Parking Garage		INSPECTOR:	

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA				
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>		
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Level of standing water in dikes	none <input type="checkbox"/>	in _____		
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Condition of piping: corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	yes <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	yes <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	yes <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	yes <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	yes <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Check for <u>water</u> level in tanks	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	yes <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Leak detection equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Stained concrete/wood/gravel	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drainage unimpeded	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grounding clamps and cables condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Electrical equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Fire extinguishers in place	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Remote shut down devices	yes <input type="checkbox"/>	no <input type="checkbox"/>		
No smoking signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Engine off signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of signage	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____

Leaks from generator? Yes ___ No ___ Comments _____

Proposed Corrective Action _____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: **1800 gal**

DATE:

LOCATION: **Electrical Vault**

INSPECTOR:

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA				
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>		
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Level of standing water in dikes	none <input type="checkbox"/>	in _____		
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Condition of piping: corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	yes <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	yes <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	yes <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	yes <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	yes <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Check for <u>water</u> level in tanks	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	yes <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Leak detection equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Stained concrete/wood/gravel	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drainage unimpeded	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grounding clamps and cables condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Electrical equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Fire extinguishers in place	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Remote shut down devices	yes <input type="checkbox"/>	no <input type="checkbox"/>		
No smoking signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Engine off signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of signage	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____

Leaks from generator? Yes___ No___ Comments_____

Proposed Corrective Action_____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility; therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: **500 gal**
LOCATION: **USED OIL**

DATE:
INSPECTOR:

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA				
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>		
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Level of standing water in dikes	none <input type="checkbox"/>	in _____		
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Condition of piping: corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	yes <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	yes <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	yes <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	yes <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	yes <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Check for water level in tanks	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	yes <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Leak detection equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Stained concrete/wood/gravel	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drainage unimpeded	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grounding clamps and cables condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Electrical equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Fire extinguishers in place	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Remote shut down devices	yes <input type="checkbox"/>	no <input type="checkbox"/>		
No smoking signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Engine off signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of signage	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: **500 gal**
LOCATION: **Motor Oil**

DATE:
INSPECTOR:

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA				
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>		
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Level of standing water in dikes	none <input type="checkbox"/>	in <input type="checkbox"/>		
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Condition of piping: corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	yes <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	yes <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	yes <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	yes <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	yes <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Check for <u>water</u> level in tanks	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	yes <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Leak detection equipment condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Stained concrete/wood/gravel	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Drainage unimpeded	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Safety equipment in place and operative	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Grounding clamps and cables condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
Electrical equipment condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
Fire extinguishers in place	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Remote shut down devices	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
No smoking signs	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Engine off signs	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Condition of signage	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: 500 gal		DATE:	
LOCATION: Lube oil		INSPECTOR:	

ITEM	RESULTS	COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA			
Leaks from tanks	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>	If so, tank No.	
Piping Leak	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>	If so, tank No.	
Stained soil	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		
Adequate Free board (e.g. excess snow/ice)	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		
Dike condition	<div style="display: flex; justify-content: space-between;"> <i>sat</i> <input type="checkbox"/> unsat <input type="checkbox"/> </div>		
Height of dike walls diminished from designed height	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		
Visible sheen on standing water in dikes	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		
If not, was the standing Water drained?	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		
Grass height, weeds, debris	<div style="display: flex; justify-content: space-between;"> <i>sat</i> <input type="checkbox"/> unsat <input type="checkbox"/> </div>		
Level of standing water in dikes	<div style="display: flex; justify-content: space-between;"> <i>none</i> <input type="checkbox"/> in <input type="checkbox"/> </div>		
Storm water drains away	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		
Is the dike valve closed and locked? (or the plug in place?)	<div style="display: flex; justify-content: space-between;"> yes <input type="checkbox"/> no <input type="checkbox"/> </div>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Condition of piping:	yes	no		
corrosion	<input type="checkbox"/>	<input type="checkbox"/>		
paint	sat	unsat		
	<input type="checkbox"/>	<input type="checkbox"/>		
supports	sat	unsat		
	<input type="checkbox"/>	<input type="checkbox"/>		
High level alarms	sat	unsat		
condition	<input type="checkbox"/>	<input type="checkbox"/>		
Tank Label condition	sat	unsat		
	<input type="checkbox"/>	<input type="checkbox"/>		
Condition of outlet piping	sat	unsat		
	<input type="checkbox"/>	<input type="checkbox"/>		
Valves locked closed	yes	no		
when not in use	<input type="checkbox"/>	<input type="checkbox"/>		
Drawoffs locked closed	yes	no		
when not in use	<input type="checkbox"/>	<input type="checkbox"/>		
Tank shell and roof:	yes	no		
discoloration	<input type="checkbox"/>	<input type="checkbox"/>		
corrosion	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
cracks	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
bulging	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
paint	sat	unsat		
	<input type="checkbox"/>	<input type="checkbox"/>		
Tank foundation:	yes	no		
cracking of ring wall	<input type="checkbox"/>	<input type="checkbox"/>		
uneven settlement	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
cracking of cradle	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
loosened anchor bolts	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
all openings liquid tight	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
Check for <u>water</u> level in	sat	unsat		
tanks	<input type="checkbox"/>	<input type="checkbox"/>		
Drain water drawoff	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
Roof vents clear	yes	no		
	<input type="checkbox"/>	<input type="checkbox"/>		
PV vent operates freely	yes	no		
(where required)	<input type="checkbox"/>	<input type="checkbox"/>		
Level gauging equipment	sat	unsat		
condition	<input type="checkbox"/>	<input type="checkbox"/>		
Oil/water separator	sat	unsat		
condition	<input type="checkbox"/>	<input type="checkbox"/>		
Safety equipment in place	yes	no		
and operative	<input type="checkbox"/>	<input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Leak detection equipment condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Stained concrete/wood/gravel	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Drainage unimpeded	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Safety equipment in place and operative	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Grounding clamps and cables condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
Electrical equipment condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
Fire extinguishers in place	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Remote shut down devices	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
No smoking signs	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Engine off signs	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Condition of signage	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: 500 gal		DATE:	
LOCATION: Hydraulic oil		INSPECTOR:	
ITEM	RESULTS		COMMENTS
			PROPOSED CORRECTIVE ACTION
TANK AREA			
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>	
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>	
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>	
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>	
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>	
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>	
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>	
Level of standing water in dikes	none <input type="checkbox"/>	in <input type="checkbox"/>	
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>	
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>	

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Condition of piping: corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	yes <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	yes <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	yes <input type="checkbox"/>	no <input type="checkbox"/>		
paint	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	yes <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	yes <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	yes <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	yes <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Check for <u>water</u> level in tanks	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	yes <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Leak detection equipment condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Stained concrete/wood/gravel	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Drainage unimpeded	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Safety equipment in place and operative	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Grounding clamps and cables condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
Electrical equipment condition	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		
Fire extinguishers in place	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Remote shut down devices	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
No smoking signs	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Engine off signs	<i>yes</i> <input type="checkbox"/>	<i>no</i> <input type="checkbox"/>		
Condition of signage	<i>sat</i> <input type="checkbox"/>	<i>unsat</i> <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____



SUGGESTED MONTHLY ABOVEGROUND PETROLEUM STORAGE TANK INSPECTION CHECK OFF LIST

Owners of regulated petroleum AST's are required by New Hampshire rule [Env-Wm 1402.29 (a)] to inspect their AST facilities not less than monthly.

This inspection form is intended to assist owners/operators of AST facilities on what items to inspect and conditions to look for when inspecting their facility. Because each AST facility is different, some of the elements contained on the inspection check off list may not apply to a particular facility, therefore, facility owners can use this form and enter "N/A" for those items on the inspection form that do not apply.

NOTE: Response in *bold italics* are considered as the 'no action' responses

FACILITY NAME: **240 gal**
LOCATION: **Annex**

DATE:
INSPECTOR:

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
TANK AREA				
Leaks from tanks	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Piping Leak	yes <input type="checkbox"/>	no <input type="checkbox"/>	If so, tank No.	
Stained soil	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Adequate Free board (e.g. excess snow/ice)	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Dike condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Height of dike walls diminished from designed height	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Visible sheen on standing water in dikes	yes <input type="checkbox"/>	no <input type="checkbox"/>		
If not, was the standing Water drained?	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grass height, weeds, debris	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Level of standing water in dikes	none <input type="checkbox"/>	in <input type="checkbox"/>		
Storm water drains away	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Is the dike valve closed and locked? (or the plug in place?)	yes <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of piping: corrosion	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
paint	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
supports	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
High level alarms condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank Label condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Condition of outlet piping	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Valves locked closed when not in use	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Drawoffs locked closed when not in use	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Tank shell and roof: discoloration	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
corrosion	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
cracks	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
bulging	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
paint	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Tank foundation: cracking of ring wall	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
uneven settlement	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
cracking of cradle	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
loosened anchor bolts	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
all openings liquid tight	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Check for <u>water</u> level in tanks	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Drain water drawoff	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Roof vents clear	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
PV vent operates freely (where required)	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		
Level gauging equipment condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Oil/water separator condition	<i>sat</i> <input type="checkbox"/>	unsat <input type="checkbox"/>		
Safety equipment in place and operative	<i>yes</i> <input type="checkbox"/>	no <input type="checkbox"/>		

ITEM	RESULTS		COMMENTS	PROPOSED CORRECTIVE ACTION
Oil spill response and clean up supplies available	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Leak detection equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
RACK/TRANSFER AREA				
Leaks from equipment	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Stained concrete/wood/gravel	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Drainage unimpeded	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Safety equipment in place and operative	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Grounding clamps and cables condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Electrical equipment condition	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		
Fire extinguishers in place	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Remote shut down devices	yes <input type="checkbox"/>	no <input type="checkbox"/>		
No smoking signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Engine off signs	yes <input type="checkbox"/>	no <input type="checkbox"/>		
Condition of signage	sat <input type="checkbox"/>	unsat <input type="checkbox"/>		

SIGNATURE: _____ DATE: _____

NAME: (print or type): _____

Leaks from generator? Yes ___ No ___ Comments _____

Proposed Corrective Action _____

Annual Leak Monitoring and Overfill Protection Test Form For Underground or Aboveground Storage Tank Systems

N. H. Code of Administrative Rules Env-Wm 1401.31, "Operation of Leak Monitoring Equipment" (UST Rules) and
N. H. Code of Administrative Rules Env-Wm 1402.29, "Inspection and Reporting Requirements" (AST Rules)

The New Hampshire Department of Environmental Services (DES) has developed this form to document the required annual testing of leak monitoring and/or overfill protection equipment at this UST or AST storage facility.

Facility Name: _____ UST ☐ AST ☐ DES Site No. / Facility No. _____

Facility Address: _____ City: _____ Zip: _____

A. Annual Leak Monitoring and/or Overfill Protection Test Results

Complete the following checklist using: Y = Yes, N = No, N/A = Not Applicable

1. Leak monitor and/or overfill protection equipment. Manufacturer's name and model number:					
		Tank #:			
2.	Leak monitor console assignments are correctly programmed and labeled for all sensors.				
3.	Tank secondary containment sensor is positioned per manufacturers requirements.				
4.	Piping secondary containment (piping, intermediate, and or dispenser sump) sensors are positioned per manufacturer requirements to monitor all containment.				
5.	Brine level of the tank interstitial space is within the manufacturers operating range.				
6.	All secondary containment is liquid tight and free of debris, water and regulated substance.				
7.	All sensors were visually inspected, manually tested, confirmed operational and reset.				
8.	The leak monitor console audible alarm is confirmed operational and reset.				
9.	The leak monitor console visuals alarms are operational and reset.				
10.	The communication equipment (e.g., modem) is operational for leak monitoring systems and will relay alarms to a remote station.				
11.	Overfill alarm sensors and shutoff devices were manually activated and verified to be at the proper operational setting. (Required for ASTs)				
12.	In summary, the leak monitor system is confirmed to be in proper operation per manufacturer's requirements, all sensors are reset and alarms have been cleared.				
					Pass Fail

If your answer is No, then describe on the reverse side of this form how and when these items will be corrected.

B. Certification

I hereby certify that the equipment identified in this document was tested for proper operation in accordance with manufacturer's requirements.

Name (print): _____ Company Name: _____

Company Address / State / Zip: _____

Tester's Signature: _____ Phone No.: (____) _____ Test Date: _____

C. Record Keeping and Reporting Instructions

1. Keep a completed copy of this form for owner/operator records.
2. The owner/operator must submit a copy of the annual test report to NHDES within 30 days of testing.

Mailing Address:

N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES
OIL REMEDIATION AND COMPLIANCE BUREAU
PO BOX 95; CONCORD NH 03302-0095

Phone # (603) 271-3644

Fax # (603) 271-2181

Operator's Checklist



Visual Monthly Inspections

Underground Storage Tank Systems

RSA 146-C:19 requires monthly visual inspections by or under the direction of the Class B operator at an underground storage tank facility.

Date of Inspection: _____

UST Facility ID Number: _____

Facility Name: _____

Name of person conducting inspection: _____

Name of Class B operator directing the inspection: _____

☒ If true ; ☒ If false; Y to indicate corrective work was completed; N/A if not applicable

	1	2	3	4	5
(1) Each vent riser shows no visible damage.					
Repaired?					
(2) Each pressure/vacuum vent cap shows no visible damage.					
Replaced?					
(3) Each spill bucket shows no presence of oil, water or debris.					
Removed and disposed of content in accordance with all applicable federal, state, and local requirements?					
(4) Each coaxial fill adaptor cap, two-point fill adaptor cap, and dry break adaptor cap is not loose, and shows presence of a gasket and tightness of fit.					
(circle one) Tightened, repaired or replaced?					
(5) Each coaxial fill adaptor, two-point fill adaptor, and dry break adaptor shows tightness of fit.					
(circle one) Tightened or replaced?					
(6) Each dry break poppet valve shows a continuous seal, that depresses evenly across the valve seat and reseals properly.					
(circle one) Repaired or replaced?					
(7) Each motor fuel dispenser hose shows no tears, leaks, holes, kinks, crimps or defects of any kind.					
Replaced?					
(8) Each motor fuel dispenser nozzle shows no leak, obstruction of vapor recovery holes, or defects of any kind.					
Replaced?					

	1	2	3	4	5
(9) Each motor fuel dispenser cabinet interior and sump shows no evidence of leaking components and shows no oil, water, or debris present.					
Repair and disposed of content in accordance with all applicable federal, state, and local requirements?					
(10) Each oil transfer and dispensing area shows no presence of oil spills.					
(circle one) Reported and remediate any spill in accordance with all applicable federal, state, and local requirements?					
(11) Each leak, interstitial and product monitoring system enunciation panel is operating properly.					
(circle one) Repaired or replaced?					

The certified operator shall document each monthly maintenance inspection, including all findings and repairs made. Please keep this form with your records for a period of no less than 3 years.

Repair or Maintenance Notes:

I have forwarded this inspection checklist to

Name: _____

Company: _____

Address: _____

Town/ State: _____

Date Forwarded: _____

Signature of Inspector _____



Visual Monthly Inspections

Oil - Water Separator

Date of Inspection: _____

Location of Oil – Water Separator: _____ Commerce Ave. _____

Name of Person Conducting Inspection: _____

- 1) Is oil present? Yes: ____ No: ____ If Yes, how much? _____
- 2) Does oil need to be removed (there should be less than 1")? Yes: ____ No: ____
- 3) Is there any floatable debris present? Yes: ____ No: ____ Was it removed? _____
- 4) Is dirt built up in the Oil – Water Separator? Yes: ____ No: ____ Was it removed? Yes: ____
No: ____
- 5) What is the overall condition of the vault? Any cracks, doors open/close correctly,
etc. _____

- 6) Inspect the discharge water at the outfall. Any oil or oily sheen present? Yes: ____ No: ____
- 7) Does the Oil – Water Separator require maintenance? Yes: ____ No: ____
- 8) Any other observations?

- 9) Provide a copy of the Oil – Water separator Visual Monthly Inspection Checklist to the
Airport Environmental Compliance Specialist.



Visual Monthly Inspections

Sluice Gates

Date of Inspection: _____

Location of Sluice Gates: _____ Commerce Ave. _____

Name of Person Conducting Inspection: _____

1) Is contamination (oil, debris) present? Yes: ____ No: ____ If Yes, provide a description.

2) Is dirt built up in the Sluice Gate sump? Yes: ____ No: ____ What is the depth? _____

3) What is the overall condition of the vault? Any cracks, doors open/close correctly, etc. _____

4) Operation of Sluice Gate Doors verified? Yes: ____ No: ____ Any issues, doors open/close fully and correctly? Yes: ____ No: ____

5) Does the Sluice Gates require maintenance? Yes: ____ No: ____

6) Any other observations?

7) Provide a copy of the Sluice Gates Visual Monthly Inspection Checklist to the Airport Environmental Compliance Specialist.

ENVIRONMENTAL Fact Sheet



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WMD-REM-2

2014

Marking Requirements for Aboveground Petroleum Storage Tanks (ASTs)

Permanent tank markings indicating the product stored and system specifications are required for all aboveground storage tanks (ASTs) that are regulated by Env-Or 300. Tank markings have been a requirement for all regulated tanks since April 25, 2000. Regulated AST facilities include:

- Those facilities having a single aboveground storage tank system with an oil storage capacity of more than 660 gallons, and
- Those facilities with two or more aboveground storage tank systems, to include 55-gallon drums, having a combined oil storage capacity of more than 1,320 gallons intended for storage, transfer, or distribution of oil as defined in RSA 146-A:2,III.

Regardless of other oil storage, ASTs which store heating oil (to include used engine, transmission, gear, or hydraulic oil) used solely for heating an on-premise structure are exempt from the requirements of Env-Or 300 if they have a combined storage capacity of 1,320 gallons or less.

What do the required markings consist of?

New Hampshire requires four items of information to be permanently painted or affixed to each regulated AST. These include:

1. The tank number. For most small facilities, this will likely be Tank No. 1, No. 2, etc. The tank number painted on the tank (or permanently affixed to the tank) shall coincide with the number on the registration form submitted to the Department of Environmental Services (NHDES) by the facility owner.
2. The petroleum product stored in the tank (diesel, gasoline, No. 2 fuel oil, used oil for recycling, etc.)
3. The safe fill volume or fill height. This level corresponds to the product level that will activate the high level alarm installed on the tank. New Hampshire regulations require the installation of high-level alarms on all regulated ASTs (please see NHDES Fact Sheet WMD-REM-1 for more information on alarm system requirements).
4. The appropriate national fire rating system symbol as established by NFPA-704, Identification of Fire Hazards and Materials (known as the NFPA 4-color hazard identity symbol).

What should the marking look like?

Pursuant to Env-Or 305.03, all lettering shall be at least 2 inches high and shall be painted in a

color contrasting with the color of the tank. Decals meeting the size and color criteria described above permanently affixed to each tank are also acceptable.

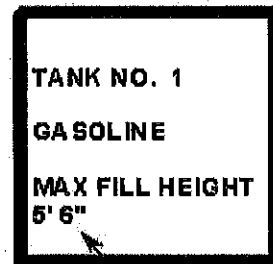
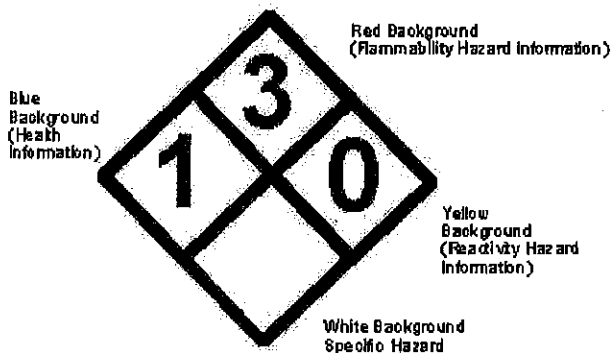
Where should the markings be placed?

The markings should be placed directly on the tank at a location that is visible to the person filling the tank. If no portion of the tank is visible (e.g., the tank is filled from a remote filling location), then this information should also be placed at a location readily observed while the tank is being filled, whether it be on a structure containment wall, a building wall, etc.

What does the NFPA decal look like?

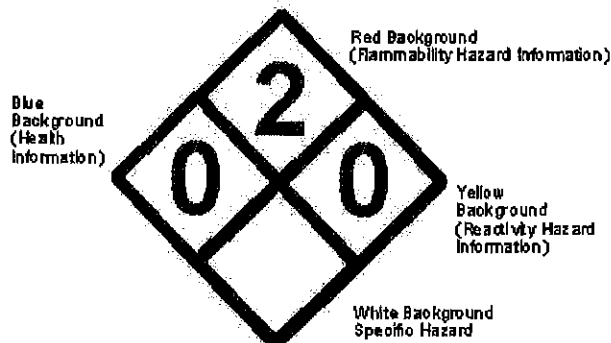
The NFPA decal, also known as the hazard identity system, consists of a diamond shape symbol that provides emergency response personnel with information concerning the health hazard, fire hazard, reactivity hazard and any specific hazard the contents of the tank may exhibit. These hazards are represented using a standard rating system to ensure consistency. Therefore, a tank storing diesel fuel will always display the same hazard codes. A picture of the appropriate decal for the various petroleum products typically stored in ASTs is shown below.

NFPA Symbol for
Gasoline, Crude Oil,
Aviation Gas, and JP-4



Maximum Fill Height shall correspond to the height in which the high-level alarm will activate.

NFPA Symbol for Diesel Fuel,
Fuel Oil (No. 2- No. 6)
Kerosene, JP-1 JP-3, and JP-5



Note:

Asphalt and Motor Oil have the following symbols:

Health (Blue) - 0
Flammability (Red) - 1
Reactivity (Yellow) - 0
No specific hazard symbol

DISCLAIMER: Information contained in this Fact Sheet is current as of February 7, 2014. Statutory or regulatory changes that may occur after that date may cause part or all of the information to become invalid. If there are any questions concerning the current status of this information, please contact us at (603) 271-3899.

ENVIRONMENTAL Fact Sheet



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WMD-REM-3

2014

Monthly Inspection Guidelines for Aboveground Petroleum Storage Tanks

Owners of regulated aboveground storage tanks (ASTs) are required by Administrative Rules Part Env-306.07 to inspect their AST facilities not less than monthly. The records showing the results of the monthly inspection must be maintained for at least three years. The purpose of the inspection is to identify conditions at an AST facility that could result in a release from a tank, piping or fitting to the environment, if not corrected in a timely manner.

Who must inspect their tanks?

Owners of regulated AST facilities must inspect all their tanks at least monthly. Regulated AST facilities include:

- Those facilities having a single aboveground storage tank system with an oil storage capacity of more than 660 gallons, and
- Those facilities with two or more aboveground storage tank systems, to include 55-gallon drums, having a combined oil storage capacity of more than 1,320 gallons intended for storage, transfer, or distribution of oil as defined in RSA 146-A:2,III.

Regardless of other oil storage, ASTs which store heating oil (to include used engine, transmission, gear, or hydraulic oil) used solely for heating an on-premise structure are exempt from the requirements of Env-Or 300 if they have a combined storage capacity of 1,320 gallons or less.

What must be inspected?

Pursuant to Env-Or 306.07(a & b), a monthly inspection shall include:

- Deficiencies such as leaks, surface wetting, discoloration, blistering or evidence of corrosion, cracks, chime distortion or other structural damage;
- Cracks, areas of wear, visible shell thinning, evidence of poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank or piping insulation, malfunctioning equipment, and structural and foundation weaknesses;
- For insulated tanks and insulated piping, all exterior surfaces of insulation. For other than insulated tanks and insulated piping, all exterior surfaces of tank and piping;
- All secondary containment, pipes, valves and other associated equipment;
- All exterior surfaces of tank and piping supports; and

- All visible system components of each high level alarm and each leak detection system which is in place at the facility.

How should the inspection be performed?

The monthly inspection is generally intended to be visual in nature. Each AST facility and system is different in terms of tank size, style, contents and sophistication. Facility owners may use the inspection form created by their engineer for their Spill Prevention, Control and Countermeasure (SPCC) Plan provided that is inclusive of the requirements of Env-Or 306.02 or create their own. The important element is that the facility be inspected at least monthly and the results of the monthly inspection are documented, signed and retained for three years.

What if an inspection identifies a deficiency?

If it appears that a failure that could result in a release is eminent, the owner shall immediately implement measures to prevent the release per Env-Or 306.10. If a lesser deficiency is identified during an inspection, NHDES expects the owner to correct it as soon as practical but no later than 30 days. There is no need to notify NHDES of a deficiency unless a release of petroleum has been discovered or is suspected. The release shall be reported to NHDES in accordance with Env-Or 600. The action taken to correct the deficiency should be noted on the inspection form.

How will this inspection requirement be enforced?

Owners of AST systems are required by Env-Or 306.07 to keep records of the monthly inspection for a period of not less than three years. Maintaining a file of completed, signed and dated monthly check-off lists will meet the intent of this rule. DES will review the content of monthly inspection files during facility visits and compliance inspections.

Facility owners should be aware that compliance with Env-Or 300 is a requirement for access to state funds otherwise available to reimburse the owner of expenses associated with the cost of cleaning up an oil spill should one occur. Maintaining documented evidence of routine inspections is necessary to remain in compliance.

Who do I contact for more information?

For more information concerning AST facilities or the New Hampshire Oil Spill Cleanup Reimbursement Funds, please contact the Oil Remediation and Compliance Bureau at (603) 271-3899, or visit the NHDES website at <http://des.nh.gov/organization/divisions/waste/index.htm>.



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ENVIRONMENTAL Fact Sheet



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WMD-REM-1

2014

Overfill Prevention Equipment Requirements for Aboveground Petroleum Storage Tanks

A gauge and alarm system, designed to prevent releases to the environment by alerting the person filling the tank of a potential overfill problem, are required for all aboveground storage tanks (ASTs), even those with a capacity less than 660 gallons, that are regulated by Env-Or 300. Overfill prevention equipment has been a requirement for all regulated ASTs since April 25, 2000. Regulated AST facilities include:

- Those facilities having a single aboveground storage tank system with an oil storage capacity of more than 660 gallons, and
- Those facilities with two or more aboveground storage tank systems, to include 55-gallon drums, having a combined oil storage capacity of more than 1,320 gallons, intended for storage, transfer or distribution of oil as defined in RSA 146-A:2,III.

Regardless of other oil storage, ASTs which store heating oil (to include used engine, transmission, gear or hydraulic oil) used solely for heating an on-premise structure are exempt from the requirements of Env-Or 300 if they have a combined storage capacity of 1,320 gallons or less.

Overfilling is the most frequent cause of oil spills from ASTs and is usually associated with human error. The purpose of requiring a gauge and high-level alarm is to provide a convenient (audible and visible) signal to inform the person filling the tank of the product level in the tank and that the tank is nearly full. Remember, the most effective method of dealing with the safety concerns and the high cost of cleaning up an oil spill is to prevent one from happening. The requirements for overfill protection for all regulated ASTs are as follows:

Gauge and Alarm Must Operate Independently of Each Other - That is, the sensor or float that operates the gauge shall not be the same mechanism that triggers the alarm. This provides a back-up method of determining the liquid level or triggering an alarm in the event one system fails.

Gauge Requirements - The gauge shall be precise enough to be useful in performing inventory monitoring, potentially avoiding the need to routinely "stick" the tank to determine product level if the facility owner is required to do so by Env-Or 306.03. The "pop-up" type gauge typically found on home-heating oil tanks does not meet this requirement for tanks having a capacity greater than 660 gallons.

Alarm System Requirements - According to Env-Or 305.11(b)(2) of the New Hampshire Code of Administrative Rules, the high-level warning alarm shall be audible and visible to the person controlling transfer of oil to the AST. That means the alarm must make a sound (horn, bell, whistle, siren, etc.) and illuminate a light when the product level in the tank is too high. It shall be placed where the person filling the tank can see and hear the alarm. This rules out relying on a vent alarm alone. To meet this requirement, there must be a power source to activate the high-level alarm. Alarm systems that obtain their power source solely from batteries are not acceptable unless specifically approved by NHDES. Vent whistles may be suitable only for tanks having a capacity less than or equal to 660-gallons.

Alarm Activation - The alarm must be activated when the product level reaches 90 percent of the tank capacity on all ASTs that have a capacity of 12,000 gallons or less. For ASTs with a capacity greater than 12,000 gallons, the alarm must activate at a point that is 3 percent less than the calculated maximum safe fill height. (The calculated maximum safe fill height is determined by multiplying the rate the tank is filled by the time it takes to completely stop product flow into the tank, but not less than 2 minutes, and subtracting this volume from the total volume of the tank.)

Requirements for Regulated ASTs Not Larger than 660 Gallons – Regulated ASTs sized 660 gallons or smaller must also have overfill protection. However, pop-up style gauges and vent alarms are adequate for tanks of this size. Also, tanks that are filled by hand at a slow rate, such as a typical used oil collection tank, may not require an alarm.

Additional Overfill Prevention Considerations – In addition to gauge and alarm requirements, double walled tanks, and other tanks having a vent that is located such that an overfill would not be contained within secondary containment, shall be equipped with a mechanism that will automatically prevent the flow of oil to the tank when at a critical level. The mechanism must shut off flow when the tank is filled to 95 percent of the tank capacity on ASTs that have a capacity of 12,000 gallons or less. For ASTs with a capacity greater than 12,000 gallons, the alarm must activate at a point that is 1 percent less than the calculated maximum safe fill height. This has been a requirement for all such ASTs since May 28, 2008.

No Prior Approval Required - Specific NHDES approval is not required to install overfill protection equipment. However, if you have a question whether a specific gauge, alarm system or flow shut-off mechanism is acceptable and meets the requirements of Env-Or 300, please contact NHDES at (603) 271-3899.

Penalties - Owners of regulated AST facilities not equipped with the required overfill protection devices may be subjected to an administrative fine of \$2,000 for each missing overfill protection device on each AST. For example, if you have two ASTs that do not have gauges and high-level alarms installed, you will be subject to an administrative fine of \$8,000. The AST facility could also be subject to loss of eligibility for access to state petroleum spill cleanup reimbursement funds established by RSA 146-D, E, and F.

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WMD-REM-20

2013

Inventory Monitoring for Regulated Underground Storage Tank (UST) Systems

What is a Regulated Underground Storage Tank System?

- A UST that has a capacity to store more than 110 gallons of motor fuel (gasoline, diesel, aviation, waste oil) or hazardous materials, or
- A UST that has a capacity to store more than 1,100 gallons of heating oil which services a non-residential facility.

If you have USTs that meet the above criteria, you are required to register the tanks with the New Hampshire Department of Environmental Services (NHDES) and conduct inventory control monitoring.

Form Requirements

- Facility registration number.
- Description of substance (product) stored.
- Bulk liquid sales or usage for each operating day.
- Measurement of liquid stored (by gauge stick or automatic tank gauge to nearest 1/8" accuracy), daily for single wall tanks and monthly for double wall tanks with leak monitoring.
- Monthly measurement of water level in tank.
- Measurement of tank contents before and after each bulk liquid delivery.
- Reconciliation of the inventory data by comparing sales or usage, receipts and the quantities of stored liquid as follows: daily for single wall tanks and monthly for double wall tanks with leaking monitoring.
- Operator signature to certify accuracy.

Reporting Requirements

Notify the UST department at (603) 271-3899 within seven days, if the following is discovered upon monitoring your tank.

- A change in water level of 2" or more, or a total depth of 3" or more in any 30 day period.
- A gain or loss of product exceeding monthly sales or usage X 0.01 + gallons.
- See NHDES "Inventory Monitoring Checklist" for checklist and sample form.
<http://www.des.nh.gov/organization/divisions/waste/orcb/ocs/ustp/documents/inreport.pdf>

Alternate for Monitoring on-Premise-use Heating Oil Single Wall UST Systems
Annual Tank Gauging in Accordance with the Following Procedure (Env-Or 406.04(b)):
Tank must be full.

- Measure by gauge stick or automatic tank gauge to the nearest 1/8" accuracy both oil and water levels at the beginning and end of at least a 30-day idle period during which no oil is added to or removed from the tank.
- Operator signature to certify accuracy.
- Reporting requirements are to notify the department at 603-271-3899 within seven days, if there is a change in water level of 2" or more or there is a gain or loss of oil.

Inventory Monitoring Requirements

- Storage of heating oil for on-premise-use in UST systems, which meet "new system" requirements, is not subject to inventory monitoring.
- Inventory monitoring is applicable to storage of all regulated substances, including waste oil (waiver maybe requested--see Env-Or 409.02).
- Records must be maintained for three years (including bulk liquid receipts).
- A tightness test shall be performed on any system with an unexplained gain or loss greater than the reporting requirements specified above.

For additional information, please contact the NHDES Underground Storage Tank Program at (603) 271-3899.

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