



Maintenance & Operations Bureau – Aviation

E. F. Knapp State Airport STORMWATER POLLUTION PREVENTION PLAN



1979 Airport Road, Berlin, VT, 05641

Date Written: July 2011

Last Update: May 2019

Link to online SWPPP:

<https://outside.vermont.gov/agency/VTRANS/external/docs/stormwater/Forms/AllItems.aspx>

Table of Contents

Table of Contents	2
1 Introduction	5
2 Pollution Prevention Team	5
3 Site Description	7
3.1 Facility Information	7
3.2 Narrative Site Description	7
3.3 Site Map Link	11
3.4 Inventory of Exposed Materials and Potential Pollutant Sources	11
3.5 Inventory of Past Spills and Leaks	13
4 Non-Stormwater Discharges	13
4.5 Certification of Non-Stormwater Discharges	13
4.6 Allowable Non-Stormwater Discharges	13
5 BMP Identification/ Control Measures	13
5.5 Source Protection BMPs	13
5.6 Area Specific BMPs	14
5.6.1 Spill Prevention and Response	14
5.6.2 Vehicle and Equipment Maintenance	14
5.6.3 Vehicle and equipment washing	15
5.6.4 Pavement Maintenance	15
5.7 Site-wide BMPs	16
5.8 Spill Response	16
5.9 Vehicle and Equipment Washing	17
5.10 Sediment and Erosion Control	17
5.11 Structural BMPs	17
6 BMP Implementation	18
6.5 Routine Inspections	18
6.6 Employee Training	18
7 Monitoring Requirements	19
7.5 Quarterly Visual Monitoring	19
7.6 Routine Facility Inspection	19
7.7 Benchmark Monitoring	19
7.8 Effluent Limitations	20
7.9 Monitoring Associated with Discharges to Impaired Waters	20
8 Endangered Species	20
9 General Requirements	20
9.5 Record Keeping and Reporting	20
9.6 Maintaining the Updated SWPPP	20
9.7 Certification	21
10 Summary of Updates	22

Introduction & Regulatory Background

1 Introduction

This stormwater pollution prevention plan (SWPPP) covers the operations at the E.F Knapp State Airport in Berlin, VT. It has been developed as required under Vermont's Multi-Sector General Permit (General Permit 3-9003) and is covered under the Vermont TS4 (Transportation Separate Storm Sewer System. This SWPPP describes the facility and its operations, develops an inventory of potential pollutant sources, identifies controls and best management practices (BMP's) for reducing the discharge of pollutants in stormwater runoff, and outlines measures for implementing and reviewing this plan.

Regulatory Background:

In October 2000, the EPA published the "Multi-Sector General Permit (MSGP) for Industrial Activities", which includes provisions for regulating storm water discharges from air transportation facilities in the Sector S. VTrans was therefore required to obtain a permit for its state airports.

The Multi-Sector General Permit (MSGP) is a federally mandated National Pollutant Discharge Elimination System (NPDES) permit that covers new and existing discharges of stormwater from industrial facilities. Industrial facilities conduct activities and use materials that have the potential to impact the quality of Vermont's waters. The MSGP requires facilities to examine potential sources of pollution, implement measures to reduce the risk of stormwater contamination, and test stormwater discharges for sources of pollution.

In the State of Vermont, the Agency of Natural Resources – Department of Environmental Conservation (Vermont DEC) is the permitting authority and administers the MSGP on behalf of the U.S. Environmental Protection Agency (EPA). VTrans is covered by the MSGP under part 7 of the TS4. Permit coverage is required by private and municipal industries identified on the MSGP Standard Industrial Classification (SIC) code list.

As part of the MSGP, each industrial facility must develop a Storm Water Pollution Prevention Plan (SWPPP), which:

- Identifies the SWPPP Administrator and Team Leader with contact information and a list of their responsibilities
- Describes the facility, with information on location and activities, a site map, and a description of the storm water drainage system
- Identifies potential storm water contaminants
- Describes storm water management controls and various Best Management Practices (BMP's) needed to reduce pollutants in storm water discharges

Stormwater:

Stormwater runoff occurs when rainwater or snowmelt flows over the ground. Stormwater can pick up pollutants such as oil, grease, chemicals, nutrients, metals and bacteria, and then carry these pollutants into stormwater systems or directly into lakes, streams, rivers or wetlands. The management of stormwater runoff is at once a simple concept and a complex problem. Precipitation runs off impervious surfaces rather than infiltrating naturally into the soil. The cumulative impact resulting from the increased frequency, volume, and flow rate of stormwater runoff events can lead to destabilization of downstream channels and can also result in increased wash-off pollutant loading to receiving waters.

Precipitation runoff from construction and land disturbance activities are also considered Stormwater Runoff, including: clearing, grading, excavation, stockpiling of fill material and other activities, which expose soil related to projects that build, expand or replace or demolish something (such as a home, a store, a golf course, a road, etc.). The U.S. Environmental Protection Agency (EPA) does not include routine earth-disturbing activities that are part of the day-to-day operation of a completed facility, such as landscape maintenance or the grading of existing gravel roads.

Stormwater runoff from land disturbed by human activities can have a detrimental effect on the quality of surface waters. Such runoff may contain high levels of contaminants, such as sediment, suspended solids, nutrients (e.g. phosphorus and nitrogen), heavy metals, oil and grease, other toxins, pathogens or organic materials. After a rainfall event or during snowmelt, stormwater runoff carries pollutants into nearby Waters of the US (e.g. wetlands, streams, rivers, lakes, estuaries, and oceans). Either individually or combined with other pollutants, these discharges impair water quality which may then place beneficial uses and habitat at risk.

In addition to pollutants picked up by stormwater runoff from a rainfall event or snow melt, discharges from a storm water system may also contain wastes or wastewaters from “non-stormwater” sources, also referred to as “illicit discharges”. Sources of illicit discharges can include: sanitary wastewater illegally connected to a storm drain system; effluent from septic tanks; runoff from vehicle washing and other industrial wastewaters; improper disposal of vehicle maintenance toxics (such as used motor oil, fuel, lubricants, and paint); and spills from fueling stations, storage facilities, or other industrial activity.

2 Pollution Prevention Team

The Pollution Prevention Team (PPT) will be in charge of developing, implementing, and revising the SWPPP and ensuring that it is in compliance with the general permit.

Pollution Prevention Team (PPT) Administrator:

Kaylie Kneeland

Pollution Prevention & Compliance Section
Water Quality Unit
Maintenance Bureau
District Maintenance and Fleet Division
Vermont Agency of Transportation (VTrans)
2178 Airport Rd, Dill Bldg Unit A, Barre, VT 0560
Email: Kaylie.kneeland@vermont.gov
Cell: (802) 595-9454

Responsibilities:

1. Signatory authority
2. Administers overall compliance with Vermont MSGP Program with input from PPT Leader.
3. Facilitates initial site assessment, identification of BMP's and implementation of SWPPP.
4. Conducts annual on-site compliance review inspections and evaluations to measure SWPPP effectiveness and makes recommendations for Program improvements.
5. Conducts annual refresher training to PPT Leader.
6. Collects and quarterly visual inspections for record keeping and tracking.
7. Updates SWPPP as needed.

Pollution Prevention Team (PPT) Leader:

Eddie Middleton, VTrans Northern Aviation Maintenance Worker

Responsibilities:

1. Coordinate and implement employee and personnel training to those who are in contact with industrial activities and materials.
2. Conducts quarterly visual inspections and submits them to the program administrator.
3. Coordinate and implement regular site inspections and ongoing maintenance for Good Housekeeping Measures, BMPs, Pollution Prevention Measures, Spill Prevention Plans, and others.

4. Conduct regular evaluations to measure the effectiveness of the SWPPP and makes recommendations to the SWPPP Program Administrator on SWPPP improvements.
5. Conduct regular site inspections identifying pollutant sources and risks and take corrective actions to eliminate or minimize risks. Additional pollutant sources and risks (including corrective actions taken) must be reported to the SWPPP Program Administrator for inclusion in the SWPPP.
6. Serve as primary “Spill Response Coordinator” and conducts all required inspections, maintenance, and reporting under the “Spill Prevention Plan” in coordination with and under the direction of the VTrans Operations Hazardous Materials & Waste Coordinator (see contact information under Spills, Hazardous Materials and Waste Management).
7. Maintain spill response materials in good working order.
8. Maintain spill response equipment inventory.
9. Provide access to the online SWPPP when needed
10. Provide assistance to the VTrans MSGP Program Administrator.

3 Site Description

3.1 Facility Information

Street Address: 1979 Airport Road

City: Berlin State: VT Zip: 05641

Latitude: 44.204845 Decimal Degrees Longitude: -72.566483 Decimal Degrees

SIC Code(s): 4512-4581 MSGP Sector: Sector S

Facility Operator Contact Information (same as "PPT Leader"):

Eddie Middleton
Airport Operations and Maintenance
Barre City Place
219 N. Main St. Barre, VT 05641

3.2 Narrative Site Description

General Description

The airport is located on 250 acres of land in Berlin at an elevation of 1165' and has two runways, multiple taxiways, and parking lots resulting in approximately 38 acres of impervious surfaces. The airport has a full-service aircraft repair business. The airport has both private and state-owned airplane hangars and an airplane tie-down area. VTtrans has an airport maintenance storage facility on the property. (Refer to Site Maps link in Section 3.3).

The airport offers aircraft repair and storage, flight instruction and aircraft rentals. There is presently no scheduled passenger service at the airport but there are regular UPS flights.

Stormwater Conveyance and Discharge Points

Stormwater from the airport is regulated by one Operational Stormwater Permits (4582-9010) in addition to the Multi-Sector General Permit, which is the concern of this SWPPP.

The stormwater conveyance system for the Airport consists of a combination of overland sheet flow, grass treatment channels, dry detention pond, wet pond, and closed drainage systems of catch basins and drainage pipes, which have been mapped and are shown on the Site Plan link in Section 3.3 of this SWPPP. The jurisdictional impervious surface and treatment has not been constructed for 4582-9010.1. This map also shows the discharge points where stormwater leaves the airport property. Two of these discharge points originate from areas with industrial activity and will therefore need monitoring on a quarterly basis under the MSGP program. Those discharge points are as follows:

MSGP Discharge Point #1:

Coincides with 4582-9010 and 4582-9010.1 S/N 001. Stormwater runoff from buildings, roadways, taxiways and runways via sheet flow into grass treatment channel routed in dry detention basin discharging to unnamed tributaries to Stevens Branch.

MSGP Discharge Point #2:

Coincides with 4582-9010 S/N 003. Stormwater runoff from buildings, roadways, taxiways and runways via sheet flow into grass treatment channel routed in dry detention basin discharging to unnamed tributaries to Stevens Branch.

Airport Operations

At E.F.Knapp, John Roberti is the Fixed Base Operator (FBO). There are 14 buildings including the Snow Removal Equipment (SRE) building. The airport is operational 24 hours a day, 7 days a week.

There are approximately 65 aircraft and multiple personal vehicles on the property at any given time.

Airport Fueling

Aircraft fueling takes place at the fuel farm, which consists of two 12,000-gallon USTs. One tank is used for Avgas and the other is for Jet A fuel (See Site Plan link in Section 3.3). This fueling area is equipped with an emergency shut off system. The area has a spill kit equipped with booms and pads, a fueling procedure guideline and an emergency number/notification procedure.

Sump tests should be disposed of properly in a metal disposal container with a sealing lid. The container should be placed in a safe, easily accessed, and visible location. Before the container reaches full contact Jim Dieser or Rosa Mastrocola for disposal.

In addition, there is a mobile fueling operation provided with a 2000-gallon mobile fuel unit. (A separate spill prevention plan is not required for mobile fueling operations under 1,300 gallons.) This vehicle is equipped with pads and booms. Electronic monitoring devices have been installed to monitor the interstice of the underground storage tanks.

Deicing Operations

Some aircraft deicing is required on an infrequent basis and, when required, is applied only in the designated location (see map link in Section 3.3). Typically, about 20-40 gallons is used per plane. In a normal winter approximately 600-800 gallons of propylene glycol (50/50 mix with water) is used. Most of the glycol either evaporates or is plowed into the grassy area. Some may reach a drop inlet, which flows to a detention pond.

In addition, normal runway winter maintenance involves using sodium formate at an approximate rate of 2 ton applied over 4 miles of runway distance. Runway deicing and anti-icing materials are stored under cover in buildings and are not exposed to stormwater. Friction control material (sand) is used when conditions warrant its use within the airport operational area.

Monthly facility inspections will take place during winter months with chloride use. Areas will be inspected to make sure that BMP's are functioning properly and the site is compliant. The monthly facility inspections will be retained with this SWPPP.

Aircraft Repair and Maintenance Activities

Aircraft repair takes place at the Vermont Flying Service Hangar, which does not have any floor drains. Spill procedures are in place for this hangar. Aircraft, vehicle, and equipment maintenance is not allowed in any other hangar.

Aviation Maintenance is responsible for maintaining the airport facilities including the winter maintenance of the runways.

VTrans has developed a "Snow & Ice Control Management Plan" based on expected Level of Service at its airports. This plan dictates how winter maintenance activities specific to keeping paved surfaces open and safe will be implemented. Sand and salt may be used on vehicle parking areas outside the Airport Operational Area but salt is not used on surfaces airplanes travel.

Aircraft Washing

Aircraft are primarily washed with biodegradable soap outside on the apron in front of the Vermont Flying Service and Civil Air Patrol hangers (See Site Plan link in Section 3.3) and the wash water can sheet flow over grass areas or to a drop inlet then to a detention pond. There will be no discharge of vehicle or equipment wash water.

Washing in the tie down area or in private hangars, none of which have floor drains, is not typical as there is a lack of water facilities in these locations.

Airport Floor Drains

There are no operational floor drains on this airport. Any pre-existing floor drains have been permanently capped.

Spills, Hazardous Materials and Waste Management

In the event of a spill or any hazardous material questions, contact the VTrans Maintenance and Operations Hazardous Material Coordinator(s).

Maintenance and Operations Hazardous Material Coordinator(s) Responsibilities:

1. Administers Spill Prevention Plan and other Hazardous Materials and Waste Management activities to ensure regulatory compliance under all applicable Federal and State Programs.
2. Provides annual site inspections and training for all Hazardous Materials and Waste Management activities.

**Trevor Howard-Perusse
Hazardous Materials & Waste
Coordinator, Operations
Environmental Program**

2178 Airport Rd, Dill Bldg Unit A,
Barre VT, 05641

Email: [Trevor.Howard-
perusse@vermont.gov](mailto:Trevor.Howard-perusse@vermont.gov)

Cell: 802-793-1244

Pager: 802-250-4666

**Rosa Mastrocola,
Hazardous Materials &
Waste Coordinator,
Operations Environmental
Program**

2178 Airport Rd, Dill Bldg Unit
A, Barre VT, 05641

Email: rosa.mastrocola@vermont.gov

Cell: 802-498-7095

Pager: 802-250-4666

3.3 Site Map Link

TS4 SWPPP Site Map:

This map contains information included but not limited to permit location and limits, floor drains, wash areas, fueling areas, brine activity, stormwater permit treatment, and other permitted required information.

<http://vtrans.maps.arcgis.com/apps/webappviewer/index.html?id=a8e738fcea314a96a56dac4d7716a100>

TS4 SWPPP General Map:

This map contains information included but not limited to permit location and limits, VTrans reported spills, uncommon species, endangered species, and other permitted required information.

<http://vtrans.maps.arcgis.com/apps/webappviewer/index.html?id=7dd4d217cce14a8a9b1555dbc1ceb25e>

3.4 Inventory of Exposed Materials and Potential Pollutant Sources

Table 1: Inventory of Site Areas and Activities Exposed to Stormwater

Map Key	Activity/ Area of the facility	Significant Materials	Amount (Approx.)	Discharge Point
Fuel Farm	Fueling of aircraft	Jet-A	10,000 gallons	MSGP DP #1 & #2
		100-unlead	10,000 gallons	
		Mobil Fuel Truck	500 gallons	
Washing Areas	Washing of vehicles and aircraft	Vehicles and the fuel they carry	Amounts contained within vehicles	MSGP DP #1 & #2
		Vehicles hydraulic fluid	Amounts contained within vehicles	
Parking	Parking of automobile vehicles	Sand/salt	Applied as needed for winter conditions	MSGP DP #1 & #2
		Vehicles and the fuel they carry	Amounts contained within vehicles	
Runways	Aircraft take-off & landings	Sodium formate	1 ton/4 miles of runway	MSGP DP #1 & #2
		Sand	Applied as needed for winter conditions	
Tiedown Area	Outside storage of aircraft	Aircraft and the fuel and fluids they carry	Amounts contained within aircraft	MSGP DP #2

Table 2: Significant Materials Used Onsite

Trade Name Material	Chemical/ Physical Description	Stormwater Pollutants
Diesel Fuel	Clear yellowish liquid/ Red in Winter	Petroleum distillate, oil & grease, naphthalene, xylene
Engine Oil	Amber liquid petroleum hydrocarbon	Petroleum distillate, mineral oil, heavy metals
Jet-A Aircraft Fuel (UST)	Clear to straw-colored liquid	Hydrocarbons, kerosene
100-Unlead Aircraft Fuel (UST) AvGas	Blue liquid	Hydrocarbons, alkylate, toluene, butane, isopentane
Lubricants	Black oily liquid hydrocarbon	Oil & grease, lead, cadmium
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oils
Brake fluid	Dark colored liquid, glycol-based	Ethylene glycol
Antifreeze/coolants, including aircraft anti-icing/ deicing fluids	Clear green/yellowish liquid	Ethylene glycol, propylene glycol, heavy metals
Transmission fluid	Red liquid	Mineral oil, glycols, heavy metals, petroleum distillates
Unleaded gasoline	Clear liquid with strong hydrocarbon odor	Hydrocarbons, toluene, ethyl alcohol, xylene, ethylbenzene, benzene, naphthalene
Ice Melt (such as Ice-b-gone)	Typically white, granular particles	Calcium chloride
Salt	White crystalline powder or granules	Sodium formate or potassium acetate
Sand	Granular material	Sediment
Heating Oil	Clear Brown	Petroleum distillate, Hydrocarbons,

3.5 *Inventory of Past Spills and Leaks*

2015WMD481: 09/17/2015, Ultralight plane crash, less than 2 gallons spilled.

4 Non-Stormwater Discharges

4.5 *Certification of Non-Stormwater Discharges*

There are no known or observed non-stormwater discharges leaving this facility.

4.6 *Allowable Non-Stormwater Discharges*

There are no known or observed non-stormwater discharges leaving this facility.

5 BMP Identification/ Control Measures

5.5 *Source Protection BMPs*

Preventative maintenance– Vehicles and aircraft to be used at the airport are to be kept in good working order with attention paid to ensure that any leaks are promptly taken care of.

Good Housekeeping – Maintenance of vehicles and equipment to be conducted in designated areas that are kept free of clutter and debris. Significant materials to be labeled, organized, and placed within containment as appropriate.

Spill response – There is a Spill Prevention Plan in place for the airport which includes procedures to minimize the contamination associated with any spills or leaks that may occur on the site.

5.6 Area Specific BMPs

5.6.1 Spill Prevention and Response

BMP	Implementation Date	Responsible Party
Discourage topping off fuel tanks	December 2006	VTrans PPT Leader
Provide spill kits at all fueling stations and on mobile fueling trucks	December 2006	VTrans PPT Leader
Use dry cleanup methods for spills. Spill areas are never washed down with water	December 2006	VTrans PPT Leader
Use proper spill control methods as defined in the Airport's Spill Prevention Plan	December 2006	VTrans PPT Leader
Use Spill/overflow protection equipment	January 2018	VTrans PPT Leader
Provide and encourage the use of sump test disposal containers	September 2014	VTrans PPT Leader
Store materials in appropriate containers and locations with proper labeling	January 2018	VTrans PPT Leader

5.6.2 Vehicle and Equipment Maintenance

BMP	Implementation Date	Responsible Party
Regularly check for leaking fluids and use pans to collect leaks that do occur	December 2006	VTrans PPT Leader
Do not pour waste fluids into drains	December 2006	VTrans PPT Leader
Segregate and label waste materials	December 2006	VTrans PPT Leader
Encourage recycling of waste fluids, oils, engines, and batteries	December 2006	VTrans PPT Leader
Encourage use of non-toxic materials when feasible	December 2006	VTrans PPT Leader
Conduct maintenance operations in designated locations and under cover	December 2006	VTrans PPT Leader
Drain fluids from decommissioned equipment and equipment that is not being used for an extended period of time. Inspect monthly for leaks	January 2018	VTrans PPT Leader

5.6.3 Vehicle and equipment washing

BMP	Implementation Date	Responsible Party
Limit washing to designated areas	December 2006	VTrans PPT Leader
Encourage use of non-toxic cleaning agents when possible	December 2006	VTrans PPT Leader

5.6.4 Pavement Maintenance

BMP	Implementation Date	Responsible Party
Encourage use of non-coal tar-based sealants for pavement crack repair	December 2006	VTrans PPT Leader

5.7 Site-wide BMPs

BMP	Implementation Date	Responsible Party
Store significant materials under cover, to the extent possible. Keep yard free of debris	December 2006	VTrans PPT Leader
Grade, berm, or curb areas where pollutants are stored to minimize exposure to stormwater	January 2018	VTrans PPT Leader
Long-term parked vehicles and equipment will be checked for fluid leaks periodically. Any leaky vehicle should use drip pans and absorbents.	December 2006	VTrans PPT Leader
Spring inspections will be conducted to check for snowmelt areas and clean up of left-over debris.	December 2006	VTrans PPT Leader
Conduct reporting under EPA Tier II Chemical Inventory Reports	March 1, 2011	VTrans PPT Leader
Sweep when needed to reduce the discharge of sediment. When washing down areas, let the water sheet flow over vegetation	January 2018	VTrans PPT Leader
Keep dumpster lids closed. Dumpsters with no lids should have secondary containment, berm, graded sheet flow to vegetation, or curbing	January 2018	VTrans PPT Leader
Clean catch basins when sediment reaches 2/3 of sump depth. Clean culverts to be clear of trash and sediment.	January 2018	VTrans PPT Leader
Stabilize erosion areas leading to surface water immediately	January 2018	VTrans PPT Leader

5.8 Spill Response

The SWPPP will be modified within 14 days of knowledge of a spill to include information regarding the nature, date, and cause of the release. The plan will be modified with measures to prevent reoccurrence and to improve response.

The site has a separate spill prevention plan (see attached document) specific to the facility and all employees receive training on spill prevention and response. The spill prevention plan, in part, includes information on the following topics:

FUELING

At all times fueling operations will be monitored. At no time will the fuel delivery hose be left unattended. Any overfill will be immediately reported to a supervisor.

SPILLS

All Agency resources will be used to minimize the impact of a spill, using absorbent pads and booms. Sand will be used for emergency dikes. All employees of this facility are made aware of this plan. All spills over two gallons must be reported to a Maintenance and Operations Hazardous Material Coordinator.

Environmental Products & Services, (802) 862-1212, can be used for spills beyond the ability of the on-site personnel to mitigate.

5.9 Vehicle and Equipment Washing

There is washing of aircraft in designated areas. Wash water from washing area flows over vegetated terrain and/or to structural BMP's, such as detention ponds. Wash water does not reach a discharge point.

5.10 Sediment and Erosion Control

Prior to beginning a construction project disturbing greater than one acre the facility will contact the Agency at (802) 241-4320 to determine if a construction general permit (CGP) is necessary.

The primary control measure that will be utilized to prevent and address erosion areas includes maintaining stable ground surfaces with good grass or vegetated cover for unpaved areas of the airport.

5.11 Structural BMPs

As part of the airport's Operational Stormwater Permit authorizations, there are several structural stormwater treatment practices within the site. With regular inspections and maintenance, these features have been designed to adequately remove pollutants and prevent them from leaving the site. The jurisdictional impervious surface and treatment practices for 4582-9015 have not been built yet.

<u>Structure:</u>	Detention Basin & Grass Swale
<u>Date of Implementation:</u>	January 2006
<u>Discharge Point:</u>	MSGP Discharge Point #2
<u>Area(s) Treated:</u>	Runways, taxiways apron, hangars, parking areas, and washing areas

<u>Pollutants Removed:</u>	Sediment
<u>Maintenance Requirement(s):</u>	Remove accumulated sediment as necessary, inspect outlet structure and re-grade adjacent areas to ensure proper drainage flow.
<u>Frequency:</u>	annual
<u>Structure:</u>	Detention Basin
<u>Date of Implementation:</u>	January 2006
<u>Discharge Point:</u>	MSGP Discharge Point #1
<u>Area(s) Treated:</u>	Runways, apron, hangars
<u>Pollutants Removed:</u>	Sediment
<u>Maintenance Requirement(s):</u>	Remove accumulated sediment as necessary, inspect outlet structure and re-grade adjacent areas to ensure proper drainage flow.
<u>Frequency:</u>	annual

6 BMP Implementation

6.5 Routine Inspections

Facility inspections and quarterly inspections will be performed quarterly by the VTrans PPT Leader. If stormwater BMPs are found to be functioning incorrectly, maintenance will be performed before the next anticipated storm event, or as necessary to maintain effectiveness of the stormwater controls.

6.6 Employee Training

Topics to be included in employee training:

- Introduce Pollution Prevention Team and discuss need for the SWPPP
- Spill response procedure
- Review of past spills
- Review of good housekeeping procedures
- Proper material handling procedures
- Proper disposal or recycling of materials
- Be sure employees know where cleaning materials and spill kits are located
- Review sources of stormwater pollutants used onsite
- Familiarize employees with drainage routes near areas where industrial materials are handled
- Review of site specific BMP's, their maintenance requirements and need for additional BMP's.
- Review monitoring, inspection, record keeping, and reporting requirements.

All members of the Pollution Prevention Team will be trained annually. Members of the PPT will ensure that all new employees the work with industrial materials or activities are trained to implement control measures and follow BMP's outlined in this SWPPP. Records of attendance are to be kept with this plan.

7 Monitoring Requirements

Ultimately, the goal of this SWPPP it is to protect the quality of water resources. To evaluate the effectiveness of the measures described here, the following monitoring activities will be conducted on the stormwater discharges. Monitoring results will be used to regularly reassess the impact of pollutant sources and the need for best management practices (BMPs). The SWPPP will be updated and improved throughout the term of the permit and these updates will be informed by the results of monitoring. All monitoring results and SWPPP modifications shall be kept in the SWPPP.

7.5 Quarterly Visual Monitoring

Each discharge point on the site will be examined each quarter by the VTrans PPT Leader for evidence of contamination during a runoff event. Monitoring will take place within the first 30 minutes of a precipitation or snowmelt event if possible, but no more than 60 minutes after onset. Precipitation events must be greater than 0.1 inches in magnitude and occur at least 72 hours after the last runoff producing event. More detailed instructions are attached with this SWPPP.

7.6 Routine Facility Inspection

During normal facility operating hours each quarter you must conduct inspections of areas of the facility covered by the requirements in this permit, including the following:

- Areas where industrial materials or activities are exposed to stormwater;
- Areas identified in the SWPPP and those that are potential pollutant sources;
- Areas where spills and leaks have occurred in the past three years;
- Discharge points; and
- Control measures used to comply with the effluent limits contained in this permit.

7.7 Benchmark Monitoring

Benchmark monitoring at this Airport is not required as this facility does not exceed the threshold of using more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis. Should this threshold be surpassed then Benchmark Monitoring would be required.

7.8 Effluent Limitations

There are no effluent limitations with this site.

7.9 Monitoring Associated with Discharges to Impaired Waters

The facility does not discharge to impaired waters.

8 Endangered Species

A review of the Vermont Agency of Natural Resources' Natural Resource Atlas indicates that there has been a sighting of a state-threatened animal on the airport. It has been determined, however, that the existing industrial activities at the E.F.Knapp State Airport do not pose an adverse risk to endangered or threatened species, or critical habitat designated under the Endangered Species Act. See Resource Maps at the link in Sections 3.3 of this SWPPP.

9 General Requirements

9.5 Record Keeping and Reporting

A copy of this SWPPP will be sent to the Stormwater Section and the original will be maintained online at the following link:

<https://outside.vermont.gov/agency/VTRANS/external/docs/stormwater/Forms/AllItems.aspx>. Records pertaining to inspections, monitoring, employee trainings, and spills will be kept with the SWPPP. These records must be retained for at least five years after the expiration of the permit. This plan will be made available upon request to the Agency, operator of a municipal separate storm sewer receiving the discharge, and to the public if requested in writing to do so.

9.6 Maintaining the Updated SWPPP


This SWPPP will be amended if inspections or monitoring should indicate a deficiency, or Agency personnel determine that it is not effective at controlling stormwater pollutant discharges. The plan will also be amended if changes occur to the facilities layout or operations. A history of amendments will be kept with this plan in Section 10.

9.7 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 gather and evaluate 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.

Name (print): Alysha Kane

Title: VTrans MOB Stormwater Technician

Signature: 

Date Signed: 9/23/2018

10 Summary of Updates

Instructions: Keep a record of changes to the SWPPP that are required as a result of monitoring, inspections, or at the request of Agency personnel.

Date Plan Amended	Summary of Updates