BURLINGTON INTERNATIONAL AIRPORT

Annual Report For General Permit 3-9014

April 19, 2010

National Pollutant Discharge Elimination System (NPDES) Number: VTR040000
For Stormwater Discharges from Small Municipal Separate Storm Sewer Systems
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In accordance with Section 5.3 Reporting, contained in General Permit 3-9014, the Burlington International Airport (BTV) is required to submit an annual report overviewing the status of compliance with permit conditions by April 1 of each year of the permit term.

Background

The 1987 Amendment to the Federal Clean Water Act (CWA) of 1972 (CWA 402(p)(5)) directed the Environmental Protection Agency (EPA) to address the problems of flooding, water pollution and public health threats caused as a result of stormwater runoff from developed lands or as commonly termed, urban stormwater runoff. This runoff from roads, rooftops and other impervious surfaces associated with developed lands causes erosion/property damage; endangers or destroys aquatic wildlife and wildlife habitats; causes unhealthy algal blooms; and endangers public health via contact during recreation sports by contaminating source water used for public water supplies.

The CWA required that the EPA address urban stormwater runoff in a phased approach starting with the largest urban areas in the United States based on population census data. In November 1999, the EPA issued new federal stormwater regulations known as the Phase II Stormwater Rule for metropolitan areas of less than 100,000 people.

Under the Phase II Rule, nine municipalities in Vermont with municipal separate storm sewer systems (MS4) are required to seek coverage under the MS4 General Permit or apply for an individual permit. These are Burlington, South Burlington, Colchester, Milton, Winooski, Essex, Essex Junction, Williston and Shelburne. In addition to these municipalities, three publicly owned, non-traditional separate storm sewer systems have also been designated and are required to seek coverage. These systems are owned or operated by the University of Vermont, Burlington International Airport (BTV) and the Vermont Agency of Transportation.

The MS4 General Permit is a National Pollutant Discharge Elimination System (NPDES) permit and has a five-year permit term. The requirements of this MS4 General Permit apply to areas served by each MS4 that are located within either the U.S. Census Bureau designated urban area (UA) or watersheds that are principally impaired by stormwater and so classified by the Vermont Agency of Natural Resources, Department of Environmental Conservation (DEC).

As a permit condition, each MS4 must develop, implement and enforce a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Implementation of best management practices consistent with the provisions of the SWMP required pursuant to this permit constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable".
The SWMP must be developed and implemented by the expiration date of the MS4 permit, and must include information for the minimum control measures as described in the permit.

There are six minimum control measures required of each designated permittee under the MS4 General Permit: (1) Public Education and Outreach, (2) Public Participation/Involvement, (3) Illicit Discharge Detection and Elimination, (4) Construction Site Runoff Control, (5) Post-Construction Runoff Control, and (6) Pollution Prevention/Good Housekeeping.

Each MS4 must also comply with certain special conditions, including: Water Quality Controls for Discharges to Impaired Water bodies, Consistency with Total Maximum Daily Load (TMDL) Requirements and Source Water Protection requirements.

In June 2003, BTV filed a Notice of Intent for General Permit 3-9014. The Notice of Intent (NOI) included a narrative that outlined how BTV planned to comply with the six minimum control measures and special conditions noted above. Subsequently, BTV submitted an updated NOI and complete SWMP in April, 2008. Since submittal of the 2008 NOI, BTV has implemented or is in the process of implementing many of the BMP’s proposed under the six minimum measures.

In accordance with Section 5.3 Reporting, of General Permit 3-9014, BTV is required to submit an annual report discussing the status of compliance with the permit by April 1 of each year as noted above. Conditions set forth in Section 5.3 Reporting, are listed below with descriptions of the current status of each requirement noted in bold type.

**Condition 5.3.1.:**

The 2009 Annual Report includes the status of BTV’s compliance with permit conditions, an assessment of the appropriateness of the identified BMP’s, progress toward achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures and special conditions;

**Six Minimum Control Measures**

**Minimum Measure #1 - Public Education and Outreach**

1) **BMP # 1:** BTV will work with the regional group to develop a website dedicated to public education as it relates to water quality issues. In the event that the regional group is not able to develop a website, BTV will make modifications to their existing site to accommodate a water quality section for the purpose of public education.

Status: Implemented. The water quality website, www.smartwaterways.org, has been developed and is currently operational. Appendix A contains the Regional Stormwater Education Program Annual Review for 2009-2010.

BTV has also provided an environmental page on the airport website. The BTV website address is http://www.btv.aero. Links to the MS4 annual reports, the regional water quality website and the City of Burlington stormwater management websites are included on the environmental page of the website. The environmental page address is http://www.btv.aero/about_us/environmental.html.
Timeframe: Not applicable.

Measurable Goals: Stormwater behavior changes in the public. This change will be assessed through a behavior survey conducted by the Chittenden County Regional Stormwater Education Program (RSEP) approximately every 5 years. The contractor responsible for conducting the survey will report findings to the RSEP. Appendix A contains the Regional Stormwater Education Program Annual Review for 2009-2010.

Person(s) Responsible for BMP: The RSEP.

Rationale for Selection: With an ever increasing number of people utilizing the internet, a website is a cost effective way to reach the public and educate them about water quality related issues.

Minimum Measure #2 - Public Participation/Involvement

1) BMP # 1: BTV will establish designated Advertisement Space in the Airport Terminal for public participation and involvement purposes.

Status: Implemented. BTV has designated advertisement space in the terminal for public participation and involvement. The designated advertisement space in the terminal remains in place and contains the a stormwater display developed by Marketing Partners.

Timeframe: BTV will review and update (if necessary) the content of the advertisement by December 31st of each year.

Measurable Goals: BTV will review, re-evaluate, and update (if necessary) the display once per year.

No update required for this year.

Person(s) Responsible for BMP: The Burlington International Airport’s public participation and involvement program and each of the three BMPs will be implemented and coordinated by the Airport Operations Division, and overseen by the Stormwater Management Program Manager, who is responsible for the overall coordination of the storm water management program at the airport.

Rationale for Selection: With over 1,000,000 people passing through the terminal area annually, this will prove to be a valuable tool to reach the public.

2) BMP # 2: BTV will institute a storm drain tagging program, which will help to inform and remind the public that storm water runoff will reach waters of the state. Stencils will be placed on all publicly viewed storm drains. This will not include storm drains located on the air carrier ramp, due to marking restrictions.

Status: Implemented. A storm drain tagging program has been developed, and is ongoing. Tags have been placed on all publicly viewed storm drains. The tags are inspected and replaced as necessary each year.
**Timeframe:** Ongoing. BTV will inspect storm drain tags and re-tag storm drains as necessary by April 30th of each year.

**Measurable Goals:** BTV will re-tag each applicable storm drain as necessary once every year.

*BTV inspected all landside catch basins last spring and installed new tags as necessary. All landside catch basins will be inspected again this April, and new tags will be installed as necessary.*

**Person(s) Responsible for BMP:** The Burlington International Airport’s public participation and involvement program and each of the three BMPs will be implemented and coordinated by the Airport Operations Division, and overseen by the **Stormwater Management Program Manager**, who is responsible for the overall coordination of the storm water management program at the airport.

**Rationale for Selection:** With over 1,000,000 people passing through the terminal area annually, this will prove to be a valuable tool to reach the public.

3) **BMP # 3:** BTV will provide a designated display rack. Located in the terminal concourse area and readily visible to the public, the display rack will provide a location for entities other than BTV to display literature and information on storm water pollution prevention and water quality. Entities that could use the space include other traditional and non-traditional MS4s, the State of Vermont, the Lake Champlain Committee, Friends of the Winooski River, etc.

**Status:** Implemented. BTV has provided a designated display rack adjacent to the designated advertisement space mentioned in BMP #1. The display rack is currently being maintained. BTV has added an additional brochure rack on the side of the display which has a greater degree of visibility. Feedback from Marketing Partners is such that one of the principal websites requesting information originates from BTV. One conclusion is that travelers see the information contained in the kiosk display, and then access the website via the Airport’s WIFI system.

**Timeframe:** BTV will review and update (if necessary) the information contained in the display rack by December 31st of each year.

**Measurable Goals:** BTV will display literature and information on stormwater pollution prevention and quality in the rack each year.

*BTV continues to display literature and information on stormwater pollution prevention and quality.*

**Person(s) Responsible for BMP:** The Burlington International Airport’s public participation and involvement program and each of the three BMPs will be implemented and coordinated by the Airport Operations Division, and overseen by the **Stormwater Management Program Manager**, who is responsible for the overall coordination of the storm water management program at the airport.
**Rationale for Selection:** With over 1,000,000 people passing through the terminal area annually, this will prove to be a valuable tool to reach the public. Because of the size of the terminal concourse area, this BMP provides the potential to reach many more people than allowed by other methods of public participation and involvement.

**Minimum Measure #3 – Illicit Discharge Detection and Elimination**

1) **BMP # 1:** A plan to detect and eliminate all illicit discharges will be developed, implemented and enforced as part of the SWMP.

   **Status:** Completed. A complete SWMP was submitted in April, 2008 for Vermont Agency of Natural Resources (VT. ANR) review, and subsequently approved.

   **Timeframe:** The SWMP will be reviewed and updated (as required) by December 31st of each year.

   **Measurable Goals:** Measurable goals of this BMP as outlined in the 2003 NOI, and status of these goals are as follows:

   1) BTV will review and update the SWMP each year.

      **No major updates to the SWMP were required for 2009.**

   2) BTV will complete outfall monitoring as outlined in the monitoring schedule contained in the SWPPP (see SWMP – Volume 2).

      **Monitoring results have been performed by VHB Pioneer during the past year and results submitted to the VT. ANR, MSGP Coordinator for review. See Appendix B for a copy of the submitted report.**

   3) BTV will conduct annual trainings for airport staff and tenants.

      Some aspects of the training have been accomplished as part of BTV’s everyday activities including good housekeeping, recycling, maintenance of structures, etc. However, formalized training on the SWPPP has not been completed to date.

      **BTV intends to have the material covered as follows:**

      BTV will work with operations staff to provide a stormwater quiz and survey as part of the badging process. The intent of the survey is to educate BTV staff and tenants on stormwater issues as they pertain to the airport, and provide them with a better level of understanding about action taken by BTV to address stormwater pollution. This approach will cover BTV employees and most of BTV’s tenants. Since badges expire annually, everyone will receive the information once a year whenever their badge is due.
A draft copy of the survey is contained in Appendix C for ANR review and approval. If approved, BTV will implement this into the annual badging process.

Person(s) Responsible for BMP: The Burlington International Airport’s illicit discharge detection and elimination plan and each of the associated activities will be implemented and overseen by the Stormwater Management Program Manager, who is responsible for the overall coordination of the storm water management program at the airport

Rationale for Selection: Development and implementation of a plan to detect and eliminate illicit discharges, as well as continuation of the ongoing BTV stormwater study program, are paramount to meeting and achieving the goals outlined in the MS4 General Permit.

2) BMP # 2: An employee questionnaire will be developed in conjunction with ANR and circulated which will help evaluate the success of the program. Questions asked will help determine the level of awareness of storm water pollution and water quality issues and allow for suggestions to be made. The questionnaires may also provide BTV with additional information regarding discharges from tenants.

Status: A draft survey has been developed and included in Appendix C for ANR review and approval.

Timeframe: BTV will develop a draft of the questionnaire and provide to ANR for review by June 2008. The questionnaire will be completed and distributed to employees and tenants by June 2009.

Measurable Goals: BTV will distribute 500 questionnaires to employees and tenants by June 2009.

A draft copy of the survey is contained in Appendix C for ANR review and approval. If approved, BTV will distribute this questionnaire to its employees and tenants, and implement this into the annual badging process.

Person(s) Responsible for BMP: The Burlington International Airport’s illicit discharge detection and elimination program and each of the associated activities will be implemented and overseen by the Stormwater Management Program Manager, who is responsible for the overall coordination of the storm water management program at the airport

Rationale for Selection: Soliciting input from employees and tenants not only helps to educate them, but allows us to gage relative successes or failures of efforts to date.

Minimum Measure #4 – Construction Site Runoff Control

1) BMP # 1: A plan to prevent or reduce pollutants in construction site runoff will be developed, implemented and enforced as part of the SWMP.

Status: Completed. The Construction Site Runoff Control Plan is contained in SWMP, Volume 1 – Section 5.
Timeframe: The SWMP will be reviewed and updated (as required) by December 31st of each year.

Measurable Goals: All new projects will be covered by the applicable State stormwater permit and/or conform to BTV policy.

BTV submitted Construction General Permit 3-9020 applications during the reporting period for the following projects:


b) Permit #3028-9020.2 – BTV Parking Garage Expansion

c) Permit #3028-9020.3 – BTV Reconstruct, Mark and Groove Runway 15-33

Approved permits for these three projects are presented in Appendix D.

Person(s) Responsible for BMP: The Burlington International Airport’s construction site runoff control plan and each of the associated policies will be implemented and overseen by the Stormwater Management Program Manager, who is responsible for the overall coordination of the storm water management program at the airport.

Rationale for Selection: Development and implementation of a plan to prevent or reduce pollutants in construction site runoff, including compliance with the ANR CGP, is the most effective way to ensure appropriate protection of waters of the state during construction activities.

Minimum Measure #5 – Post-Construction Runoff Control

1) BMP # 1: A plan to prevent or reduce pollutants in post-construction site runoff will be developed, implemented and enforced as part of the SWMP.

Status: Completed. The Post-Construction Runoff Control Plan is contained in SWMP, Volume 1 – Section 6.

Timeframe: The SWMP will be reviewed and updated (as required) by December 31st of each year.

Measurable Goals: 1) All new projects will be covered by the applicable State stormwater permit and/or conform to BTV policy.

BTV submitted General Permit 3-9015 applications during the reporting period for the following projects:

b) Permit #3845-INDS.A – Heritage Flight Aviation Campus Expansion Amendment

c) Permit #3028-9010.A – Consolidation of Existing BTV Stormwater Permits

Approved permits for these three projects are presented in Appendix E.

In addition, BTV informed ANR of the proposed Parking Garage Expansion project. ANR determined that a permit amendment was not required for this project, and the upward expansion of the parking garage will be covered by the 3028-9010.A permit.

Person(s) Responsible for BMP: The Burlington International Airport’s post construction runoff control plan and each of the associated policies will be implemented and overseen by Stormwater Management Program Manager, who is responsible for the overall coordination of the storm water management program at the airport.

Rationale for Selection: Development and implementation of a plan to prevent or reduce pollutants in post-construction site runoff, including compliance with the ANR Stormwater Rule, is the most effective way to ensure appropriate protection of waters of the state following the completion of construction activities.

Minimum Measure #6 – Pollution Prevention/Good Housekeeping

1) BMP # 1: A plan to ensure good housekeeping practices and pollution prevention will be developed, implemented and enforced as part of the SWMP. The plan will be developed and implemented such that also meets the requirements of the SWPPP as outlined in the MSGP.

Status: Completed. The Burlington International Airport is a non-traditional MS4. Since they are an airport, coverage under the NPDES Phase II Multi Sector General Permit (MSGP) was obtained. One condition under the MSGP is development of a Storm Water Pollution Prevention Plan (SWPPP) that includes measures for pollution prevention and good housekeeping. BTV has included the SWPPP as Volume 2 of the SWMP to meet the requirements of this BMP.

Timeframe: The SWMP will be reviewed and updated (as required) by December 31st of each year.

Measurable Goals: Annually, BTV will report cubic yardage of sediment removed by vac trucks from the storm drainage system and from paved taxiway, runway, and ramp surfaces prior to reaching the storm drains.

Utilizing maintenance staff, catch basins are cleaned as necessary throughout the year. BTV removed approximately 28 cubic yards of sediment from the storm drain system and from paved taxiway, runway, and ramp surfaces prior to reaching the storm drains during this reporting period.

Person(s) Responsible for BMP: The Burlington International Airport’s pollution prevention and good housekeeping plan and each of the associated policies will be implemented and overseen by Stormwater Management Program Manager, who is responsible for the overall coordination of the storm water management program at the airport.
Rationale for Selection: Development and implementation of a plan to prevent or reduce pollutants in site runoff and encourage good housekeeping and pollution prevention practices is the most effective way to ensure appropriate protection of waters of the state.

Special Conditions

1. Water Quality Controls for Discharges to Impaired Water Bodies

Under Section 3.1.2 of the MS4 General Permit, each MS4 discharging to a 303(d) listed (impaired) water body must control to the maximum extent practicable the discharge of the pollutants of concern to those waters, and be in compliance with all requirements of any applicable TMDL’s or watershed general permits issued for those waters. BTV has discharges to one such water body: Potash Brook (4 outfalls).

Potash Brook is principally impaired due to collected stormwater runoff. Pollutants of concern include sediment, pathogens, toxics, organic enrichment and temperature. As of April 1, 2010, a TMDL dated December 19, 2006, but no watershed general permit, has been issued by ANR for Potash Brook. Upon issuance of the new MS4 permit this year, BTV will provide ANR with necessary information to determine waste load allocations for Potash Brook, and will take part in developing the Flow Restoration Plan for Potash Brook as necessary.

For the BTV Reconstruction of Taxiways ‘B’ and ‘C’, Relocating Taxiway ‘J’, Construction of Taxiway ‘G’ covered under Permit #3028-INDS, BTV designed a stormwater system in compliance with Appendix A – Interim Permitting Requirements of the Stormwater Management Rule for Stormwater-Impaired Waters. The project design results in a net-zero hydrologic and sediment load to Potash Brook via infiltration of the entire 1 year storm volume.

2. Consistency with Total Maximum Daily Load (TMDL) Requirements

Under Section 3.1.3 of the MS4 General Permit, each MS4 must be consistent with applicable recommendations in the implementation section of the Lake Champlain TMDL and any future TMDLs for impaired waters affected by the MS4 established or approved by EPA pursuant to section 303(d) of the federal Clean Water Act. The Lake Champlain Phosphorous TMDL recommendations include: Erosion and Sediment Control at Construction Sites; Better Back Roads; and, Local Municipal Actions (including promotion of riparian buffers and impervious surface minimization.)

A. Erosion and Sediment Control at Construction Sites:

This recommendation in the TMDL is designed to minimize the amount of soil erosion during construction such that minimal amounts of soil move offsite or into waters of the state. BTV activities are consistent with following this recommendation. BTV will continue to comply with conditions of the MS4 General Permit, the Multi Sector General Permit, and the ANR General Permit for Stormwater Runoff from Construction Sites, all of which require substantial consideration for erosion prevention and sediment control.

Goals of all future BTV development will include: fitting the development plan to the site; preserving existing natural drainage ways and vegetation to the maximum extent practicable; minimizing areas of disturbed soils; minimizing the duration of soil disturbance; prevent
erosion by managing stormwater runoff; and, installing sediment control measures to prevent sedimentation of receiving waters.

**B. Better Back Roads:**

This recommendation in the TMDL is designed to prevent sediment and phosphorous due to road erosion from polluting waters of the state. It includes planning that considers the potential and adequacy of infrastructure, upgrade of infrastructure to reduce flash flood susceptibility, and employing good driveway access standards and methods to reduce road length in developments.

Because of the nature of the BTV site, and the fact that its infrastructure consists primarily of paved roads, parking areas, runways, buildings and hangars, the “Better Back Roads” TMDL recommendation is not applicable.

**C. Local Municipal Actions:**

This recommendation in the TMDL is designed to encourage municipalities to develop additional policies and actions to protect riparian buffer zones and reduce the creation of impervious surfaces by new development.

1) **Riparian Buffers:** The TMDL recommends adoption in the zoning bylaws of a minimum setback and buffer requirement on all rivers, streams, lakes and ponds. **Regulations for these buffers are controlled by the City of South Burlington Land Development Regulations. Because the airport is located in South Burlington, BTV is required to comply with these regulations.**

2) **Impervious Surface Minimization:** The TMDL recommends alteration or development of zoning codes and development standards which encourage minimization of impervious surfaces and use of open vegetated channels for stormwater runoff. **These regulations are controlled by the City of South Burlington. Because the airport is located in South Burlington, BTV is required to comply with these regulations.**

A majority of the BTV impervious area is treated by disconnection of impervious surfaces and infiltrated into the highly permeable sandy soils on-site. Any future development will be concurrent with the goals of maximizing overland flow, maximizing open space and minimizing impervious area to the maximum extent practicable.

**3. Source Water Protection requirements**

Under Section 4.1.4 of the MS4 General Permit, if applicable, each MS4 must describe the process for consultation with and involvement of public water suppliers with source water protection zones within the MS4.

BTV has four such outfalls discharging to Potash Brook, which is in the headwaters of Shelburne Bay, which is the drinking water watershed for the Champlain Water District (CWD). **BTV will notify**
CWD of future projects that discharge to Potash Brook and any future problems with existing outfalls that discharge to Potash Brook.

4. Stormwater Management Program (SWMP)

As a permit condition, each MS4 must develop, implement and enforce a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from the MS4. The SWMP will promote construction site runoff control, post construction runoff control and pollution prevention and good house keeping.

BTV has developed a SWMP to meet these requirements, and will continue to review and update the plan annually as necessary.

Condition 5.3.2.:  

The 2010 Annual Report will include results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

Monitoring results have been performed by VHB Pioneer during the past year and results submitted to the VT. ANR, MSGP Coordinator on April 7, 2010 for review. See Appendix B for a copy of the submitted report.

Condition 5.3.3.:  

The 2010 Annual Report will include a summary of the stormwater activities BTV plans to undertake during the next reporting cycle including an implementation schedule.

Current status and anticipated schedules for the next reporting cycle are as follows:

   - Project is currently under construction with completion scheduled for October, 2010.

b) Heritage Flight Building 890 and Site Renovation Project:
   - Project is currently under construction. A majority of the site work is completed and the project site stabilized. Anticipated completion date is June, 2010.

c) BTV Reconstruct, Mark and Groove Runway 15-33:
   - Work on this project is scheduled to be performed beginning May 17, 2010 with completion anticipated by November 2010.
**Condition 5.3.4.:**

The 2010 Annual Report will include proposed changes to BTV’s SWMP, including changes to any BMP’s or any identified goals that apply to the program elements.

No changes to the SWMP or BMP’s are being proposed at this time.

**Condition 5.3.5.:**

The 2010 Annual Report will include notice that BTV is relying on another entity to satisfy some of the permit obligations, if applicable.

This condition is not applicable at this time.
Appendix A

Regional Stormwater Education Program Annual Review 2009-2010
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Chittenden County Regional Stormwater Educational Program  
Annual Review: 2009-2010 Program Year Summary  

During the 2009-2010 program year (March 10, 2009 - March 9, 2010), RSEP built on its previous efforts  
by expanding the media reach and toolbox of materials for its public education and outreach campaign.  
The multifaceted campaign used both paid and unpaid media to educate the public about the effects of  
stormwater runoff on water bodies and simple steps that the public can take to reduce these effects. Key  
messages include stormwater runoff and stormwater systems, tips on prevention methods related to pet  
waste, car washing, fertilizer/chemicals, and home construction erosion or debris. Marketing Partners, Inc.  
continues to work on contract with RSEP to implement the public outreach campaign.  

RSEP accomplished the goals outlined in the 2009-10 Communication Plan, including:  

• Based on the results of the 2008 Baseline Survey & Key Results, we refined messaging and  
developed a new communication plan and media plan for 2009.  
• Extended the “Soil Test” campaign for spring and fall, which included new print creative. The  
campaign also included a partnership with the University of Vermont Agricultural Testing Lab to  
provide residents with a free soil test. Media drove to web where eligible residents were able to  
download a printable coupon.  
• Conducted a paid media campaign throughout Chittenden County in spring 2009 that included  
messaging around the importance of soil testing. The campaign consisted of 4 weeks of print ads in  
core community papers, spots airing on two of the top radio stations, a sponsorship on VPR, highly  
targeted broadcast television and cable television and placements on Front Porch Forum (an opt-in  
community e-newsletter).  
• A fall 2009 media campaign to coincide with messaging that if needed, fertilizer should be used  
two weeks before Labor Day. The campaign consisted of 2 weeks of print ads in core community  
papers, spots airing on two of the top radio stations, a sponsorship on VPR, highly targeted  
broadcast television and cable television and placements on Front Porch Forum.  
• Assisted in the development of a presentation on the overview of program and results for Dan  
Senecal-Albrecht, Senior Planner, which aired on CCTV (local public access channel).  
• Reported on multi-channel paid advertising campaign for both the spring and fall effort.  
• Made updates to the website including updating the Problems and Solutions page and adding links  
related to rain gardens, rain barrels and downspout facts.  
• Compiled website and other media visibility tracking data in order to monitor outreach  
effectiveness.  
• Continued to collaborate with partners, such as the Governor’s Clean & Clear Action Plan and  
public school officials, in furthering stormwater education outreach and the Lake Champlain Basin  
Program.
Gross Impressions/Audience Reach
Chittenden County Regional Stormwater Educational Program
Annual Review: 2009-2010 Program Year Summary

1. Unpaid Media (Public Relations)
Insert: 47,000 (Champlain Water District Report)
Online: No online unpaid media
Total impressions*: 47,000

2. Paid Media
Print: 1,130,016 (based on circulation reported by media outlet)
TV: 367,032 (gross impressions - based on Nielsen program ratings)
Radio: 324,000 (based on number of listeners age 25-54 adults, M-Fri. 6a to Midnight per Arbitron ratings)
Online: 67,800 (based on circulation reported by media outlet)
Total impressions*: 1,888,848

3. Website
Below is the website visitor information for 2009-2010. Website traffic increases are marked in conjunction with media campaigns.

*Impressions represent the total number of times a spot is heard/seen, not the number of persons who hear/see it.

NOTE: This chart includes data using two different reporting methods. In program years 2004-5 to 2007-8, Urchin website pageviews were reported. From 2008 to 2010, Google Analytics reported visits per month. Google Analytics provides a more accurate picture of actual website traffic, hence the switch in 2008.
Appendix B

Quarterly Water Chemistry Benchmark Monitoring Results
April 7, 2010

Ref: 57265.00

Ms. Christy Witters  
MSGP Program Coordinator  
Vermont Agency of Natural Resources,  
Department of Environmental Conservation  
Water Quality Division  
103 South Main Street, Building 10 North  
Waterbury, VT 05671-0408

Re: Burlington International Airport  
South Burlington, Vermont  
MSGP Permit No. 3028-9003  
Quarterly Water Chemistry Benchmark Monitoring Results

Dear Christy:

Enclosed please find the results of event-based water chemistry benchmark monitoring conducted at the Burlington International Airport (BTV) on March 11 and May 27, 2009 by VHB Pioneer. The monitoring was conducted pursuant to the Burlington International Airport Multi-Sector General Permit (MSGP) #3028-9003 Stormwater Pollution Prevention Plan (SWPPP), prepared by VHB Pioneer and submitted May 15, 2007. Specific information that pertains to station descriptions, locations, and associated drainage areas can be obtained from the SWPPP.

Benchmark monitoring was conducted at three stations (D018, Q001A, and P005) on March 11, and May 27, 2009, during the first and second quarter (January – March and April - June) sampling periods, marking the fourth and fifth quarters of benchmark monitoring for this site. A total of 0.30 inches of rain fell on March 11, 2009. The precipitation total for the May 27, 2009 event was 0.38 inches. This monitoring concludes the required four quarters of benchmark monitoring at the Burlington International Airport (BTV).

At the time of sampling on March 11 and May 27, 2009, field measurements for conductivity (µ/S) and water temperature (°C) were collected by VHB Pioneer at the monitoring stations, with results summarized in the table provided on page 1 of the Attachment. Samples were

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1 Total rainfall for March 11, 2009, as recorded at the BTV meteorological station (NOAA)  
2 Total rainfall for May 27, 2009, as recorded at the BTV meteorological station (NOAA)
analyzed for Total Suspended Solids (TSS), pH, Ammonia, Chemical Oxygen Demand (COD), and Biochemical Oxygen Demand (BOD₅) by Endyne, Inc. Laboratory Services (Endyne) in Williston, Vermont. Additionally, the May 27, 2009 benchmark samples were analyzed for the potential pollutant sources from de-icing operations that are outlined in the SWPPP, including: Sodium Formate (Formic Acid) and Propylene Glycol. Table 1 below and page 2 of the Attachment provides a summary listing of all of the benchmark sampling results to date, as well as the average concentration of each benchmark parameter. The March 11, 2009 Endyne laboratory report is provided on pages 3 and 4, and the May 27, 2009 Endyne laboratory report is provided on pages 5 and 6 of the Attachment. Additionally, data are provided on the Vermont Department of Environmental Conservation (DEC) required Discharge Monitoring Reports (DMR) on pages 7 through 18 of the Attachment.

<table>
<thead>
<tr>
<th>Parameter (units)</th>
<th>TSS (mg/l)</th>
<th>pH (s.u.)</th>
<th>Ammonia (mg/l)</th>
<th>Chemical Oxygen Demand (mg/l)</th>
<th>Biochem. Oxygen Demand (mg/l)</th>
<th>Formic Acid (mg/l)</th>
<th>Propylene Glycol (ppm, v/v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSGP Benchmark</td>
<td>100</td>
<td>6.0 - 9.0</td>
<td>19</td>
<td>120</td>
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<td>NA</td>
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**Station DO18**

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<th>Ammonia</th>
<th>COD</th>
<th>BOD₅</th>
<th>Formic Acid</th>
<th>Propylene Glycol</th>
</tr>
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<tbody>
<tr>
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<tr>
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<tr>
<td>11/16/2008</td>
<td>8</td>
<td>7.19</td>
<td>0.07</td>
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<td>*</td>
</tr>
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<tr>
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<td>7.39</td>
<td>0.56</td>
<td>223</td>
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**Station Q001A**

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<th>Ammonia</th>
<th>COD</th>
<th>BOD₅</th>
<th>Formic Acid</th>
<th>Propylene Glycol</th>
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<tr>
<td>9/9/2008</td>
<td>37</td>
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<td>0.35</td>
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<tr>
<td>11/16/2008</td>
<td>5</td>
<td>7.58</td>
<td>&lt;0.030</td>
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<tr>
<td>3/11/2009</td>
<td>53</td>
<td>7.74</td>
<td>1.7</td>
<td>190</td>
<td>65</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5/27/2009</td>
<td>8</td>
<td>7.25</td>
<td>0.08</td>
<td>110</td>
<td>61</td>
<td>1.3</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td><strong>Average</strong></td>
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<td>0.54</td>
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<td>37.2</td>
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**Station P005**

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<th>Ammonia</th>
<th>COD</th>
<th>BOD₅</th>
<th>Formic Acid</th>
<th>Propylene Glycol</th>
</tr>
</thead>
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<td>12/10/2008</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
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<td>14</td>
<td>7.34</td>
<td>0.15</td>
<td>58</td>
<td>5.8</td>
<td>&lt;0.10</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td><strong>Average</strong></td>
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<td>7.46</td>
<td>1.1</td>
<td>189</td>
<td>12.4</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Parameter not analyzed

NS - No sample taken (No Flow)

Average exceeds benchmark
Below is a summary of data for Station D018, Q001A, and P005 during the March 11, 2009 (fourth quarter) monitoring event:

**D018**
Station D018 was observed to be highly turbid and have high flow at the time of sampling (see Photograph 1 on page 19 of the Attachment). Ammonia and pH were within the limits of the benchmark threshold; however, BOD$_5$, COD, and TSS all exceeded the benchmark value that has been set forth in the MSGP (see page 2 of the Attachment).

**Q001A**
Station Q001A was observed to be highly turbid and have high flows during the time of sampling (see Photograph 2 on page 19 of the Attachment). All parameters analyzed at station Q001A were below their respective cutoff concentrations, with the exception of BOD$_5$ and COD, which exceeded their benchmark thresholds (see page 2 of the Attachment).

**P005**
Station P005 was observed to have a pool of slightly turbid and slow moving flow (see Photograph 3 on page 20 of the Attachment). This slow moving pool is created by stormwater flowing into a wetland at the culvert outfall. All parameters analyzed at station P005 were below the benchmark thresholds, with the exception of an elevated BOD$_5$ value (see page 2 of the Attachment).

Below is a summary of data for D018, Q001A and P005 during the May 27, 2009 (fifth quarter) monitoring event:

**D018**
Station D018 was observed to have clear moderate flow at the time of sampling (see Photograph 4 on page 20 of the Attachment). All parameters analyzed at station D018 were well below their respective cutoff concentrations (see page 2 of the Attachment). Additionally, the laboratory analysis showed undetected levels of Formic Acid and Propylene Glycol, which are potential pollutant sources from de-icing operations at BTV.

**Q001A**
Station Q001A was observed to have clear moderate flow at the time of sampling (see Photograph 5 on page 21 of the Attachment). All parameters analyzed at station Q001A were below their respective cutoff concentrations, with the exception of BOD$_5$, which slightly exceeded its benchmark threshold (see page 2 of the Attachment). Additionally, the laboratory analysis showed undetected levels of Propylene Glycol; however, the lab results did show a low concentration of Formic Acid.
P005
Station P005 was observed to have pooled clear and slow moving flow at the culvert outlet (see Photograph 6 on page 21 of the Attachment). All parameters analyzed at station D018 were well below their respective cutoff concentrations (see page 2 of the Attachment). Additionally, the laboratory analysis showed undetected levels of Formic Acid and Propylene Glycol.

The average concentration of benchmark parameters from all event sampling quarters are presented on page 2 of the Attachment as well as in Table 1. The average benchmark monitoring concentration of TSS, pH, and Ammonia is well below the respective benchmark value; therefore, in accordance with Section 3.2.2.3 of the MSGP, has fulfilled the monitoring requirements of this permit and no longer need to be sampled for. The average benchmark concentration of BOD₅ and COD was above the benchmark value at each of the monitoring stations, with the exception of the average concentration of COD at station Q001A, and the average concentration of BOD₅ at station P005, which were both below benchmark thresholds.

The average benchmark BOD₅ and COD concentrations are elevated above the benchmark threshold due to elevated concentrations that were observed during the March 11, 2009 spring snowmelt benchmark sampling event. De-icing potential pollutant sources (Sodium Formate and Propylene Glycol) are likely contaminants that are causing these elevated concentrations observed during this time of year. In an attempt to analyze which potential pollutant source caused the elevated BOD₅ and COD levels during the March 11, 2009 sample, a baseflow sample was taken on April 14, 2009 and analyzed for Formic Acid and Propylene Glycol. These results showed that low levels of Formic Acid and Propylene Glycol were detected at Station Q001A, however were not detected at Station D018 (see page 22 of the Attachment). Additionally, these potential pollutant sources were analyzed for during the May 27, 2009 benchmark sample. All of the potential pollutant sources were not detected during this benchmark sample with the exception of a very low level of Formic Acid that was observed at Station Q001A. The undetected Glycol and Formic Acid levels corresponded with low BOD₅ and COD concentrations below the benchmark threshold, and the low concentration of Formic Acid corresponds with a benchmark threshold exceedance of BOD₅.

Due to the elevated average of BOD₅ and COD above the benchmark threshold at each of the three monitoring stations, the SWPPP was reviewed on July 23, 2009 by Graham Sexstone and Joshua Sky of VHB Pioneer in accordance with Section 3.2.2.4 of the MSGP. Additionally, Heather Kendrew, Airport Engineer at BTV, was consulted upon review of the SWPPP. This comprehensive review showed that the BTV SWPPP has satisfied all of the requirements of Section 2 of the MSGP through the initial implementation of the SWPPP within the 270 day deadline after the effective date of the permit, the selection and implementation of best management practices that have been selected to reduce or eliminate identified potential pollutant sources, as well as the compliance with all terms and conditions of the permit, as
outlined in the SWPPP. As described in Section 3.2.2.4 of the MSGP, benchmark monitoring will be reduced to one time during the monitoring year. Monitoring will be conducted at all three stations that receive stormwater runoff from de-icing activities (D018, Q001A, and P005), during a spring snowmelt monitoring event, and the benchmark parameters that will be analyzed will include BOD₅ and COD.

In addition to the required continued annual SWPPP benchmark monitoring, an updated water quality monitoring plan for BTV is being developed. The objective of this plan is to pinpoint the contamination source that is causing the elevated BOD₅ and COD concentrations, and implement potential remediation activities.

VHB Pioneer will continue to monitor sampling station D018, Q001A, and P005 once per year, during a spring snowmelt event, for the remainder of the permit duration, in accordance with Section 3.2.2.3 and 3.2.2.4 of the MSGP.

If you have any questions or comments regarding these data, please do not hesitate to contact Joshua Sky or me.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

[Signature]

Graham A. Sexstone
Water Resource Scientist

GAS/pwe
Attachment

cc: Heather Kendrew
ATTACHMENT
Burlington International Airport  
MSGP Permit No. 3028-9003  
Benchmark Monitoring Field Data  
Collected by VHB Pioneer  
Sampler: Graham A. Sexston  
Date: June 23, 2008 - May 27, 2009

<table>
<thead>
<tr>
<th>Station</th>
<th>Date</th>
<th>Sampling Time</th>
<th>Conductivity (µS)</th>
<th>Temperature (°C)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q001A</td>
<td>9/9/2008</td>
<td>12:55</td>
<td>1038</td>
<td>14.2</td>
<td>Moderate flow, iron seepage</td>
</tr>
<tr>
<td></td>
<td>11/16/2008</td>
<td>5:05</td>
<td>891</td>
<td>18.8</td>
<td>Moderate flow, iron seepage</td>
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<tr>
<td></td>
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<td>2495</td>
<td>2.0</td>
<td>High flow, turbid water</td>
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<tr>
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<td>15:02</td>
<td>907</td>
<td>9.8</td>
<td>Medium clear flow, iron seepage</td>
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<tr>
<td></td>
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<td>462.0</td>
<td>19.6</td>
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<td></td>
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<tr>
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<td>960</td>
<td>11.9</td>
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<tr>
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<tr>
<td></td>
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<td>Slow flowing/ponded water, clear</td>
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Notes  
NS - No Sample Taken (No Flow)
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<th>pH (SU)</th>
<th>Ammonia (mg/L)</th>
<th>COD (mg/L)</th>
<th>BOD₅ (mg/L)</th>
<th>Formic Acid (mg/L)</th>
<th>Propylene Glycol (ppm, v/v)</th>
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<td>53</td>
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<td>1.7</td>
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<tr>
<td>5/27/2009</td>
<td>8</td>
<td>7.25</td>
<td>0.08</td>
<td>110</td>
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<td>0.09</td>
<td>22</td>
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<td>9/9/2008</td>
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<td>0.07</td>
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<td>0.07</td>
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<td>&lt;1.0</td>
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<tr>
<td>5/27/2009</td>
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<td>7.34</td>
<td>0.15</td>
<td>58</td>
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<td>&lt;1.0</td>
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<td>12.4</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

Notes:
- Average exceeds MSGP designated Benchmark
- *Not analyzed
- **Detection designation due to improper dilution by laboratory
- ***NA
- pH statistics based on hydrogen ion concentration
Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Randolph, VT facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory.

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

[Signature]

Harry B. Locker, Ph.D.
Laboratory Director

www.endynelabs.com
# Laboratory Report

**CLIENT:** VHB Pioneer  
**PROJECT:** BTVS WPPD 57265.00  
**WORK ORDER:** 0903-3046  
**DATE RECEIVED:** 03/11/2009  
**DATE REPORTED:** 03/19/2009

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<th>Method</th>
<th>Analysis Date/Time</th>
<th>Lab/Tech</th>
<th>NELAC</th>
<th>Qual.</th>
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<tr>
<td><strong>COD</strong></td>
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<td>mg/L</td>
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<td>N CAL</td>
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<td>3/17/09</td>
<td>R JLC</td>
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<td></td>
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<tr>
<td><strong>pH</strong></td>
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<td>EPA 150.1</td>
<td>3/11/09 16:15</td>
<td>W JSS</td>
<td>N</td>
<td></td>
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<td>3/12/09</td>
<td>W EPG</td>
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<th>Units</th>
<th>Method</th>
<th>Analysis Date/Time</th>
<th>Lab/Tech</th>
<th>NELAC</th>
<th>Qual.</th>
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<tr>
<td><strong>COD</strong></td>
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<td>mg/L</td>
<td>Hach 8000</td>
<td>3/17/09</td>
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<td>A</td>
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<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
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<td>SU</td>
<td>EPA 150.1</td>
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<td>W JSS</td>
<td>N</td>
<td></td>
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<tr>
<td><strong>Solids, Total Suspended</strong></td>
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<td>mg/L</td>
<td>EPA 160.2</td>
<td>3/12/09</td>
<td>W EPG</td>
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<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Units</th>
<th>Method</th>
<th>Analysis Date/Time</th>
<th>Lab/Tech</th>
<th>NELAC</th>
<th>Qual.</th>
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<tbody>
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<td><strong>BOD-5day</strong></td>
<td>19</td>
<td>mg/L</td>
<td>EPA 405.1</td>
<td>3/11/09 14:22</td>
<td>W JSS</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td><strong>COD</strong></td>
<td>320</td>
<td>mg/L</td>
<td>Hach 8000</td>
<td>3/17/09</td>
<td>N CAL</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td><strong>Ammonia as N</strong></td>
<td>2.0</td>
<td>mg/L</td>
<td>SM20 4500 NH3 B+C</td>
<td>3/17/09</td>
<td>R JLC</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>7.63</td>
<td>SU</td>
<td>EPA 150.1</td>
<td>3/11/09 16:15</td>
<td>W JSS</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td><strong>Solids, Total Suspended</strong></td>
<td>19</td>
<td>mg/L</td>
<td>EPA 160.2</td>
<td>3/12/09</td>
<td>W EPG</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Randolph, VT facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. “Sub” indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. “A” indicates the referenced laboratory is NELAC accredited for the parameter reported. “N” indicates the laboratory is not accredited. “U” indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an “A” meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory.

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

www.endynelabs.com
### Parameter | Result | Units | Method | Analysis Date/Time | Lab/Tech | NELAC | Qual.
--- | --- | --- | --- | --- | --- | --- | ---
Formic Acid-Screen | < 0.10 | mg/L | mod. EPA 300.0 | 5/28/09 17:32 | W CM | U |
BOD-5day | < 2 | mg/L | EPA 405.1 | 5/28/09 10:05 | W JSS | A |
COD | 21 | mg/L | Hach 8000 | 6/2/09 | N BEW | A |
Ammonia as N | 0.35 | mg/L | EPA 350.1 | 6/2/09 | R RJM | A |
pH | 7.84 | SU | EPA 150.1 | 5/27/09 16:28 | W JSS | N |
Solids, Total Suspended | 3 | mg/L | EPA 160.2 | 5/27/09 | W KJS | A |
Glycol Package
Propylene Glycol | < 1.0 | ppm, v/v | EPA 8015B | 6/1/09 | W MDP | U |
Ethylene Glycol | < 1.0 | ppm, v/v | EPA 8015B | 6/1/09 | W MDP | U |

### Parameter | Result | Units | Method | Analysis Date/Time | Lab/Tech | NELAC | Qual.
--- | --- | --- | --- | --- | --- | --- | ---
Formic Acid-Screen | 1.3 | mg/L | mod. EPA 300.0 | 5/28/09 18:12 | W CM | U |
BOD-5day | 61 | mg/L | EPA 405.1 | 5/28/09 10:13 | W JSS | A |
COD | 110 | mg/L | Hach 8000 | 6/2/09 | N BEW | A |
Ammonia as N | 0.08 | mg/L | EPA 350.1 | 6/2/09 | R RJM | A |
pH | 7.25 | SU | EPA 150.1 | 5/27/09 16:30 | W JSS | N |
Solids, Total Suspended | 8 | mg/L | EPA 160.2 | 5/27/09 | W KJS | A |
Glycol Package
Propylene Glycol | < 1.0 | ppm, v/v | EPA 8015B | 6/1/09 | W MDP | U |
Ethylene Glycol | < 1.0 | ppm, v/v | EPA 8015B | 6/1/09 | W MDP | U |
**Vermont Multi-Sector General Permit**

**Discharge Monitoring Report (DMR)**

**Facility Name:** Burlington International Airport

**Monitoring Year:**
- Jan-Mar

**Parameter** | **Cut-off Concentration (mg/L)** | **Sample Result (mg/L)**
---|---|---
Total Suspended Solids | 100 mg/L | 53 mg/L
pH | 6.0-9.0 s.o. | 7.79 s.o.
Ammonia | 19 mg/L | 1.7 mg/L
Chemical Oxygen Demand | 120 mg/L | 190 mg/L
Biochemical Oxygen Demand | 30 mg/L | 65 mg/L

**Effluent Limitation Monitoring** *(additional space is available on the back)*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x year / Daily Max</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg / Monthly avg</td>
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<td></td>
</tr>
<tr>
<td>1x year / Daily Max</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg / Monthly avg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x year / Daily Max</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg / Monthly avg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Impaired Waters Monitoring**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cut-off Concentration (if applicable)</th>
<th>Sample Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 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:** Joshua Sky  
**Phone Number:** 302-415-1788

**Signature:**

**Date:** 10/28/09
### Effluent Limitation Monitoring (continued)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
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</thead>
<tbody>
<tr>
<td>1x year</td>
<td>Daily Max</td>
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<td></td>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
<td></td>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
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<td></td>
</tr>
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<td>30 day avg</td>
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<td></td>
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</tr>
<tr>
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<td>Daily Max</td>
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<td>Monthly avg</td>
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<tr>
<td>1x year</td>
<td>Daily Max</td>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
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<tr>
<td>30 day avg</td>
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<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:


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  Attn: MSGP Coordinator  
  Water Quality Division  
  103 South Main Street  
  Building 10 North  
  Waterbury, Vermont 05671-0408
### Benchmark Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cut-off Concentration (mg/L)</th>
<th>Sample Result (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Suspended Solids</td>
<td>100 mg/L</td>
<td>17.2 mg/L</td>
</tr>
<tr>
<td>pH</td>
<td>6.9-9.0 s.u.</td>
<td>7.39 s.u.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>19 mg/L</td>
<td>2.2 mg/L</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>120 mg/L</td>
<td>1000 mg/L</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand</td>
<td>30 mg/L</td>
<td>13.0 mg/L</td>
</tr>
</tbody>
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### Effluent Limitation Monitoring

(additional space is available on the back)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg</td>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Impaired Waters Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cut-off Concentration (if applicable)</th>
<th>Sample Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

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Name: Jordan St. Age
Phone Number: 802-388-6392
Signature: [Signature]
Date: 10/28/09
### Effluent Limitation Monitoring (continued)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
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</thead>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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<td></td>
</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
<td></td>
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<td>1x year</td>
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</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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<tr>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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<tr>
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<tr>
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<tr>
<th>Parameter</th>
<th>Cut-off Concentration (mg/L)</th>
<th>Sample Result (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Suspended Solids</td>
<td>100 mg/L</td>
<td>19 mg/L</td>
</tr>
<tr>
<td>pH</td>
<td>6.9 - 9.0 s.u.</td>
<td>7.63 s.u.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>19 mg/L</td>
<td>2.0 mg/L</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>120 mg/L</td>
<td>320 mg/L</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand</td>
<td>30 mg/L</td>
<td>19 mg/L</td>
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### Effluent Limitation Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
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<td>Daily Max</td>
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<td></td>
</tr>
<tr>
<td>30 day avg</td>
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<td></td>
</tr>
<tr>
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<td>Daily Max</td>
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<td></td>
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</tbody>
</table>

### Impaired Waters Monitoring

<table>
<thead>
<tr>
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<th>Cut-off Concentration (if applicable)</th>
<th>Sample Value</th>
</tr>
</thead>
</table>

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Name: Josh Stig

Signature: Josh Stig

Phone Number: 802-475-7185

Date: 10/25/09
## Effluent Limitation Monitoring (continued)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
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</thead>
<tbody>
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<td>Daily Max</td>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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<td></td>
</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
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</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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<td>Daily Max</td>
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<tr>
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<td>Monthly avg</td>
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</tr>
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  Waterbury, Vermont 05671-0408
## Vermont Multi-Sector General Permit

### Discharge Monitoring Report (DMR)

**Permit Number:** 3088 - 9003  
**SIC Code(s):** 4581  
**Outfall Number:** 9001A  
**Sample Date:** 5/27/09

### Benchmark Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cut-off Concentration (mg/L)</th>
<th>Sample Result (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Suspended Solids</td>
<td>100 mg/L</td>
<td>8 mg/L</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 - 9.0 s.u.</td>
<td>7.25 s.u.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>19 mg/L</td>
<td>0.08 mg/L</td>
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<tr>
<td>Chemical Oxygen Demand</td>
<td>120 mg/L</td>
<td>110 mg/L</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand</td>
<td>30 mg/L</td>
<td>61 mg/L</td>
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### Effluent Limitation Monitoring

(additional space is available on the back)

<table>
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<tr>
<th>Parameter</th>
<th>Sample Type (circle one)</th>
<th>Limitation (mg/L)</th>
<th>Sample Result (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x year</td>
<td>Daily Max</td>
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<td></td>
</tr>
<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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</tr>
<tr>
<td>1x year</td>
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<tr>
<td>30 day avg</td>
<td>Monthly avg</td>
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<td></td>
</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
<td></td>
<td></td>
</tr>
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<td>Monthly avg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Impaired Waters Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cut-off Concentration (if applicable)</th>
<th>Sample Value</th>
</tr>
</thead>
</table>

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**Name:** Josi Slg  
**Phone Number:** 802-656-7788  
**Signature:** [Signature]  
**Date:** 10/25/09
### Effluent Limitation Monitoring (continued)

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  Water Quality Division  
  103 South Main Street  
  Building 10 North  
  Waterbury, Vermont 05671-0408
## Benchmark Monitoring

<table>
<thead>
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<th>Parameter</th>
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<td>Ammonia</td>
<td>19 mg/L</td>
<td>0.35 mg/L</td>
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<tr>
<td>Chemical Oxygen Demand</td>
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## Effluent Limitation Monitoring (additional space is available on the back)

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<td>30 day avg / Monthly avg</td>
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## Impaired Waters Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Cut-off Concentration (if applicable)</th>
<th>Sample Value</th>
</tr>
</thead>
</table>

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Name: J. Sky
Phone Number: 602-425-7758
Signature: John J. Sky
Date: 10/28/09
### Effluent Limitation Monitoring (continued)

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<td>Monthly avg</td>
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<td></td>
</tr>
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<td>Daily Max</td>
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<td>Monthly avg</td>
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</tr>
<tr>
<td>1x year</td>
<td>Daily Max</td>
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<td></td>
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<tr>
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<td>Monthly avg</td>
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</tr>
<tr>
<td>1x year</td>
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<tr>
<td>30 day avg</td>
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<tr>
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<tr>
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## Benchmark Monitoring

<table>
<thead>
<tr>
<th>Parameter</th>
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<th>Sample Result (mg/L)</th>
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## Effluent Limitation Monitoring

*additional space is available on the back*

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<tr>
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Name: [Signature]

Phone Number: 802-784-6352 425-7150

Date: 10/28/09
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Photograph 1: Burlington International Airport (March 11, 2009 sample), Station D018.

Photograph 2: Burlington International Airport (March 11, 2009 sample), Q001A.

Photograph 3: Burlington International Airport (March 11, 2009 sample), P005.

Photograph 4: Burlington International Airport (May 27, 2009 sample), D018.

Photograph 5: Burlington International Airport (May 27, 2009 sample), Q001A.

Photograph 6: Burlington International Airport (May 27, 2009 sample), P005.

Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Randolph, VT facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory.

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

__________________________
Harry B. Locker, Ph.D.
Laboratory Director
### Laboratory Report

**CLIENT:** VHB Pioneer  
**PROJECT:** BTV: SWPPP Monitoring  
**WORK ORDER:** 0904-04791  
**DATE RECEIVED:** 04/14/2009

**Site: D018**  
**Date Sampled:** 4/14/09  
**Time:** 10:58

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<th>Lab/Tech</th>
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<td>W KMB</td>
<td>U</td>
<td>AN1</td>
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<td>Glycol Package</td>
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<td></td>
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**Site: Q001A**  
**Date Sampled:** 4/14/09  
**Time:** 16:14

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<td>Glycol Package</td>
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**Report Summary of Qualifiers and Notes**

AN1: Formic Acid measurement is an approximate concentration based on a single point calibration.
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BURLINGTON INTERNATIONAL AIRPORT

Annual Report
April 1, 2010

For General Permit 3-9014

Appendix C

Draft Employee & Tenant
Stormwater Quiz & Survey
Burlington International Airport (BTV) - Stormwater Quiz and Survey

The following quiz and survey is intended to determine the level of awareness of storm water pollution and water quality issues at Burlington International Airport. This exercise will also educate you on stormwater issues as they pertain to the airport, and provide you with a better level of understanding on action taken by BTV to address stormwater pollution.

This survey is being given to all BTV employees and tenants, and will assist BTV in meeting the requirements of federal stormwater regulations. All responses will be kept strictly confidential. The survey should take about 10 minutes to complete.

Please answer true or false for the following statements about stormwater pollution:

1. The more paved or gravel surfaces there are in an area, the greater the runoff volume and the greater the stormwater pollution.
   a) True  
   b) False

   *a) True, paved surfaces are impervious, which means stormwater runs off of the surface unlike vegetated areas that allow rain to sink into the ground. Impervious surfaces contribute greater runoff volumes than vegetated areas. In addition, stormwater pollutants such as oils, fuels, and hydraulic fluids are typically found on paved surfaces. When it rains, these pollutants become concentrated in the stormwater runoff, and eventually find their way into our important water resources such as streams, rivers, lakes and ponds.*

2. Storm drain collection systems at the airport drain to the South Burlington wastewater treatment facility where stormwater runoff is treated and then discharged into a nearby river.
   a) True  
   b) False

   *b) False, most of the storm drain collection systems at the airport discharge directly to nearby streams and wetlands. Illegal dumping of fluids and other non-stormwater discharges into storm drains will pollute these important water resources.*

3. Which of the following are potential sources of stormwater pollution at the airport?
   a) Rain runoff from parking lots  
   b) Rain runoff from airport aprons  
   c) Rain runoff from airport taxiways and runways  
   d) Rinse water from car and aircraft washing  
   e) All of the above

   *e) All of the above. Parking lots contain fuels, oils, hydraulic fluids, etc. that can be washed into nearby waterbodies. Airport aprons, taxiways and runways contain fuels and de-icing fluid that can be harmful to fish and other aquatic organisms. Rinse water from car and aircraft washing can contain oils and fuels that are also harmful to nearby waterbodies.*
The Burlington Airport has been designated as an operator of a Phase II regulated Small Municipal Separate Storm Sewer System (MS4), and is required to develop a storm water management program to meet the conditions of its National Pollutant Discharge Elimination System (NPDES) permit. Based on these federal regulations, a plan has been developed for BTV and its tenants to improve the water quality of nearby streams by reducing/minimizing stormwater pollution that enters these streams. The following questions pertain to this plan.

4. What is the name of BTV’s plan to reduce/minimize the discharge of stormwater pollutants into nearby waterways?
   a) Stormwater Pollution and Prevention Plan
   b) Kill all Fish and Aquatic Organism Plan
   c) Dump it into the Storm Drain and Nobody will Know Plan
   d) Increase Aircraft De-icing Fluid Discharges into Nearby Waterways Plan

   a) BTV has developed a Stormwater Pollution Prevention Plan (SWPPP) in response to Federal and State regulations. The SWPPP includes:
      • Identification of potential stormwater pollutant sources on the airport grounds
      • Best practices for reducing/minimizing discharge of stormwater pollutants from the airport grounds
      • Best practices for reducing/minimizing discharge of aircraft and runway de-icing materials into nearby waterways.
      • Illicit Discharge Detection and Elimination Plan

5. What is an example of an “Illicit Discharge”?
   a) Wastewater piped into a storm drain
   b) Fuel or oil spill that runs into a storm drain
   c) Paint dumped into a storm drain
   d) Rinsewater from aircraft washing that runs into a storm drain
   e) All of the above

   e) All of the above. Discharges from MS4’s often include wastes and wastewater from non-storm water sources. These discharges enter the system through either direct connections (e.g., wastewater piping connected to storm drains) or indirect connections (e.g., spill or disposal of used paint, oil, etc., into a storm drain). These discharges are considered “illicit” because BTV’s storm drain system is not designed to accept, process, or discharge wastes other than typical storm water runoff.

6. Why are Illicit Discharge Detection and Elimination Efforts Necessary?
   a) To improve water quality
   b) To meet federal requirements
   c) To protect our water resources
   d) All of the above

   d) All of the above. The result of illicit discharges is polluted and untreated stormwater that contributes high level of pollutants, including heavy metals, toxics, oil and grease,
solvents, nutrients, viruses, and bacteria to nearby water bodies. Pollutant levels from these illicit discharges have been shown in studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

BTV conducts periodic monitoring and sampling of stormwater discharges to determine if illicit discharges have been made.

7. What can my business do to prevent illicit discharges?

   a) Pour fluids down stormdrains, sewer systems, or on the ground
   b) Park vehicles with dripping fluid in an area that drains to a storm drain
   c) Regularly maintain equipment and vehicles and inspect for leaks
   d) Store potential pollutant materials (ie. fuels, oils, paints, hydraulic fluids, etc.) outside in unlabeled containers.

c) Per the SWPPP, BTV and its tenants are required to implement the following practices to prevent illicit discharges and minimize the amount pollutants entering nearby streams:

- Store contained fluid indoors whenever possible
- Maintain an organized inventory of potential pollutant materials used in maintenance buildings
- Park vehicles that have dripping fluid in the maintenance buildings and repair leaks
- Ensure all outdoor dumpsters, trash cans, and other waste containers are adequately covered
- Recycle, or properly dispose of waste materials regularly. Do not dispose of waste in unapproved areas (ie., do not pour fluids down stormdrains, in sewer or septic systems, or on the ground)
- Store potential pollutant materials (ie., fuels, oils, paints, hydraulic fluids, etc.) in maintenance buildings in appropriate, sealed, and labeled containers
- Regularly maintain equipment and vehicles and inspect for leaks
- Include the inspection of all containers, drums, and tanks stored outdoors as part of the routine facility inspection.
- Develop and implement spill response procedures.

8. Who should I contact if I have a stormwater related question at BTV?

   a) BTV Director of Environmental Compliance
   b) JetBlue
   c) TSA
   d) FAA

   a) All stormwater related questions at BTV should be directed to Heather Kendrew, BTV Director of Environmental Compliance. Heather is responsible for evaluating the SWPPP at BTV, and will be able to take necessary action based on any questions you may have. For general stormwater information, the Vermont Agency of Natural Resources Department of Environmental Conservation has a website that contains a lot of useful information.
9. How does stormwater runoff containing Aircraft De-icing Fluids typically used on aircrafts and runway/taxiway surfaces impact nearby streams and rivers?

   a) No impact
   b) Raises the biochemical oxygen demand in the stream, which is a fancy way of saying that it has a harmful effect on fish and other aquatic organisms
   c) Improves the health of the stream

b) Aircraft De-icing Fluids (ADF’s) used on aircraft surfaces and runways are a pollutant of concern for BTV and the Vermont Department of Environmental Conservation. ADF’s often contain very high concentrations of ethylene glycol, an organic chemical that has a harmful effect on fish and other aquatic species due to its high biological oxygen demand. ADF’s also can contain chemical additives, such as corrosion inhibitors and flame retardants.

10. Which of the following actions can be taken by BTV and its tenants to minimize the harmful effects of ADF on nearby streams?

   a) All aircraft de-icing occurs within designated aircraft de-icing zones where stormwater containing ADF is collected and discharged to an on-site treatment facility rather than discharged to nearby streams.
   b) Use of aircraft de-icing fluids that do not contain harmful chemical additives.
   c) Use of truck mounted booms to deliver more ADF fluid to the target.
   d) Use alternative parking lot, taxiway and runway surface de-icing products that have lower toxicities and readily biodegradable such as potassium acetate, sodium acetate, or sodium formate.
   e) All of the above.

   e) All of the above. More information on how your business can minimize the discharge of pollutants into nearby streams can be found by clicking on the following link:

   http://www.anr.state.vt.us/dec/waterq/stormwater/docs/msgp/sw_Bmp_Sheet_Sector_S.pdf

Scoring:
0-3 Correct – Stormwater Apprentice
4-6 Correct – Clean Stormwater Lover
7-10 Correct – Stormwater Genius

The following is intended to provide BTV with information on how BTV employees and tenants feel about stormwater pollution. All responses will be kept strictly confidential. Please indicate how you feel about the following statements.

11. I can make changes in my business practices that will improve stormwater quality.

   a) Agree
   b) Neutral
   c) Don’t know

12. My employer will listen to any suggestions I can make regarding stormwater issues.
a) Agree
b) Disagree
c) Don’t know

13. If I noticed stormwater pollution at the airport, I would report it to the proper airport personnel.

   a) Agree
   b) Disagree
   c) Don’t know

14. I feel my business takes the necessary steps to reduce and minimize stormwater pollution.

   a) Agree
   b) Disagree
   c) Don’t know

15. Please offer any suggestions that BTV can consider for improving its stormwater management program and subsequently, improve stormwater quality.

__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
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Construction General Permits 3-9020 (Amended 2008) for

- #3028-9020.2: BTV Parking Garage Expansion
- #3028-9020.3: BTV Reconstruct, Mark and Groove Runway 15-33
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June 8, 2009

City of Burlington
Heather Kendrew
1200 Airport Drive, #1
South Burlington, VT 05403

Subject: Construction General Permit 3-9020 (Amended 2006)
Authorization of Notice of Intent # 3028-9020.1
Burlington International Airport

Dear Ms. Kendrew,

Notice of Intent # 3028-9020.1 for the discharge of stormwater from the construction of Burlington International Airport has been authorized. Enclosed are five documents that you will need to maintain compliance with this authorization.

Authorized Notice of Intent (NOI).

The authorized NOI for Moderate Projects is valid until the expiration of the general permit, in 2013. If the project will proceed past the expiration date, you must reapply for coverage under this or another construction stormwater permit before that time unless a replacement permit has not been issued. Refer to Appendix D of the permit for complete information on permit expiration. If the project is completed or is sold before that time, you may terminate the authorization by submitting a Notice of Termination, subject to Subpart 7.4 of the permit.

Notice of Authorization for Posting

The notice of Authorization, which details the authorization and conditions you selected in completion of Appendix A to the CGP, must be posted in a location visible to the public in accordance with Subpart 4.5.C of the CGP. In accordance with Subpart 5.1 of the CGP, the project risk score must be re-evaluated prior to any major changes to the construction plan.

On-Site Plan Coordinator Manual

This manual provides a summary of the inspection and record-keeping requirements for your project, a copy of the permit, as well as all forms that might be needed throughout the project. This manual must

To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health, for the benefit of this and future generations.
be provided to the On-Site Coordinator, and must be available for review by DEC representatives during site inspections.

Vermont EPSC Field Guide

The Vermont Erosion Prevention and Sediment Control Field Guide was developed to assist contractors in the proper installation and maintenance of Best Management Practices.

5. Turbidity Monitoring Factsheet

The February, 2008 amendment to the Construction General Permit requires the On-Site Plan Coordinator to monitor discharges from Moderate Risk construction sites for turbidity. This factsheet explains these requirements and provides guidance on proper sampling techniques.

Sincerely,

[Signature]

Heather Mack
Administrative Assistant
Stormwater Program

Cc Gregory Goyette, Stantec, 55 Green Mountain Drive, South Burlington, VT 05405
Notice of Authorization
Under Vermont Construction General Permit 3-9020
For Moderate Risk Projects

Project Name: Burlington International
Airport
Permittee Name: City of Burlington

Notice of Intent Number: 3028-9020.1
Date of Authorization: 06/09/2009

The project listed above has received authorization under General Permit 3-9020 to discharge stormwater from the following construction activities: Construction of Taxiways and widening of shoulders.

This authorization includes the following requirements:

1. Implementation of the authorized site-specific Erosion Prevention and Sediment Control Plan.

2. All areas of disturbance must have temporary or final stabilization within 7 days of the initial disturbance. After this time, any disturbance in the area must be stabilized at the end of each work day. The following exceptions apply:
   a. Stabilization is not required if work is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours.
   b. Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches).

3. No more than 5 acres of land may be disturbed at any one time.

4. No disturbance shall occur within 50 ft upslope of any stream or river, or 100 ft upslope of any lake or pond.

5. Inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm event resulting in discharge of stormwater from the construction site.

6. If there is a discharge of visibly discolored stormwater from the construction site or from the construction site to waters of the State, the permittee shall take immediate corrective action.

7. If there is a discharge of visibly discolored stormwater from the construction site to waters of the State, the permittee shall notify DEC by submitting a report within 72 hours of the discharge.

8. The On-site Plan Coordinator shall have a copy of the EPSC Plan and all amendments available at a central location on-site for the use of all those identified as having responsibilities under the EPSC Plan whenever they are on the construction site. If an on-site location is unavailable to store the EPSC Plan when no personnel are present, notice of the plan’s location shall be posted near the main entrance at the construction site.

To request information on this authorization, or to report compliance concerns, please contact the Water Quality Division at (802) 241-3770 or write to:
VT DEC, Water Quality Division
103 South Main Street, Bldg 10 North, Waterbury, VT, 05671

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See Reverse for Posting Requirements
Permitting Directions for Posting:

This notice shall be placed near the construction entrance at a location visible to the public. If displaying near the main entrance is infeasible, the notice shall be posted in a local public building such as the town hall or public library. For linear projects, the notice shall be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a public road).

See Reverse for Posting Requirements
November 30, 2009

Burlington International Airport
Heather Kendrew
1200 Airport Drive # 1
South Burlington, VT 05403

Re: Construction General Permit 3-9020 (Amended 2008)
Authorization of Notice of Intent # 3028-9020.2
Parking Garage Expansion

Dear Ms. Kendrew,

Notice of Intent # 3028-9020.2 for the discharge of stormwater from the construction activities associated with Parking Garage Expansion described in the Notice of Intent you submitted has been authorized. Enclosed are four documents that you will need to maintain compliance with this authorization.

1. Authorized Notice of Intent (NOI)

The authorized NOI for Low Risk Projects is valid for two years from the date of the authorization. If the project will proceed past the automatic termination date, you must reapply for coverage under this or another construction stormwater permit before that time.

2. Notice of Authorization for Posting

The notice of Authorization, which details the authorization and conditions you selected in completion of Appendix A to the CGP, must be posted in a location visible to the public in accordance with Subpart 4.5.C of the CGP. In accordance with subpart 5.1 of the CGP, the project risk score must be re-evaluated prior to any major changes to the construction plan.

3. Low Risk Site Handbook for Erosion Prevention and Sediment Control

This handbook details the practices that must be implemented throughout the construction project to prevent erosion and the discharge of sediment from the construction site. Some practices must be in place before construction begins, so please review the entire handbook before starting the project.

4. Notice of Addition of Co-Permittee

This form must be submitted for every new landowner or principal operator who joins the project, in accordance with Subpart 7.2 of the CGP.

To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human health, for the benefit of this and future generations.

If you have any questions related to this permit authorization, please contact the Stormwater Section at 802-241-3779 or email stormwater@state.vt.us.

Sincerely,

[Signature]

Heather Mack
Administrative Assistant
Stormwater Program

Cc Gregory Goyette, Stantec, 55 Green Mountain Drive, South Burlington, VT 05403
Notice of Authorization
Under Vermont Construction General Permit 3-9020
For Low Risk Projects

Project Name: Parking Garage Expansion
Permittee Name: Burlington International Airport
Notice of Intent Number: 3028-9020.2
Date of Authorization: 11/30/2009

The project listed above has received authorization under General Permit 3-9020 to discharge stormwater from the following construction activities: addition of two floors onto existing parking structure, minor grading and landscaping.

This authorization includes the following requirements:
1. Implementation of erosion prevention and sediment control practices required by the Low Risk Site Handbook for Erosion Prevention and Sediment Control.

2. All areas of disturbance must have temporary or final stabilization within 7 days of the initial disturbance. After this time, any disturbance in the area must be stabilized at the end of each work day. The following exceptions apply:
   a. Stabilization is not required if work is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours.
   b. Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches).

3. No more than 2 acres of land may be disturbed at any one time.

4. No disturbance shall occur within 50 ft upslope of any stream or river, or 100 ft of any lake or pond (except disturbance for the installation of Stormwater treatment facilities or road Stream crossing with no reasonable alternative location)

5. Inspections shall be conducted at least once every (7) calendar days and within twenty-four (24) hours of the end of a storm event resulting in discharge of Stormwater from construction site.

6. If there is a discharge of visibly discolored Stormwater from the construction site or from the Construction site to waters of the State, the permittee shall take immediate corrective action.

7. If, after completing corrective action, there continues to be a discharge of sediment from the construction site to waters of the State, the permittee shall notify DEC by submitting a report within 72 hours of the discharge.

To request information on this authorization, or to report compliance concerns, please contact the Water Quality Division at (802) 241-3770 or write to:

VT DEC, Water Quality Division
103 South Main Street, Bldg 10 North
Waterbury, VT, 05671

See reverse for posting requirements
Permittee Directions for Posting:

This notice shall be placed near the construction entrance at a location visible to the public. If displaying near the main entrance is infeasible, the notice shall be posted in a local public building such as the town hall or public library. For linear projects, the notice shall be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a public road).
April 5, 2010

City of Burlington
Heather Kendrew
1200 Airport Drive #1
South Burlington, VT 05403

Re: Construction General Permit 3-9020 (Amended 2008)
Authorization of Notice of Intent # 3028-9020.3
Reconstruct Runways 15-33

Dear Ms. Kendrew,

Notice of Intent # 3028-9020.3 for the discharge of stormwater from the construction of Reconstruct Runways 15-33 has been authorized. Enclosed are five documents that you will need to maintain compliance with this authorization.

Authorized Notice of Intent (NOI).

The authorized NOI for Moderate Projects is valid until the expiration of the general permit, in 2013. If the project will proceed past the expiration date, you must reapply for coverage under this or another construction stormwater permit before that time unless a replacement permit has not been issued. Refer to Appendix D of the permit for complete information on permit expiration. If the project is completed or is sold before that time, you may terminate the authorization by submitting a Notice of Termination, subject to Subpart 7.4 of the permit.

Notice of Authorization for Posting

The notice of Authorization, which details the authorization and conditions you selected in completion of Appendix A to the CGP, must be posted in a location visible to the public in accordance with Subpart 4.5.C of the CGP. In accordance with Subpart 5.1 of the CGP, the project risk score must be re-evaluated prior to any major changes to the construction plan.

On-Site Plan Coordinator Manual

This manual provides a summary of the inspection and record-keeping requirements for your project, a copy of the permit, as well as all forms that might be needed throughout the project. This manual must be provided to the On-Site Coordinator, and must be available for review by DEC representatives during site inspections. Included in the Manual is the Notice of Addition for use by all landowners and persons who meet the definition of Principal Operator (Subparts
2.1B, 3.1B of the CGP) and who were not included on the original NOI must submit a Notice of Addition Form.

Vermont EPSC Field Guide

The Vermont Erosion Prevention and Sediment Control Field Guide was developed to assist contractors in the proper installation and maintenance of Best Management Practices.

Turbidity Monitoring Factsheet

The February, 2008 amendment to the Construction General Permit requires the On-Site Plan Coordinator to monitor discharges from Moderate Risk construction sites for turbidity. This factsheet explains these requirements and provides guidance on proper sampling techniques.

Sincerely,

Heather Mack
Administrative Assistant
Stormwater Program

Cc Todd Duguay, Stantec Consulting Services, 55 Green Mountain Drive, South Burlington, VT 05403
**Notice of Authorization**
Under Vermont Construction General Permit 3-9020
For Moderate Risk Projects

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Reconstruct Runways 15-33</th>
<th>Notice of Intent Number:</th>
<th>3028-9020.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permittee Name:</td>
<td>City of Burlington</td>
<td>Date of Authorization:</td>
<td>04/05/2010</td>
</tr>
</tbody>
</table>

The project listed above has received authorization under General Permit 3-9020 to discharge stormwater from the following construction activities: Reconstruct mark and groove Runway 15-33.

This authorization includes the following requirements:

1. Implementation of the authorized site-specific Erosion Prevention and Sediment Control Plan.

2. All areas of disturbance must have temporary or final stabilization within 7 days of the initial disturbance. After this time, any disturbance in the area must be stabilized at the end of each work day. The following exceptions apply:
   a. Stabilization is not required if work is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours.
   b. Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches).

3. No more than 5 acres of land may be disturbed at any one time.

4. No disturbance shall occur within 50 ft upslope of any stream or river, or 100 ft of any lake or pond (except disturbance for the installation of Stormwater treatment facilities or road Stream crossing with no reasonable alternative location).

5. Inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm event resulting in discharge of stormwater from the construction site.

6. If there is a discharge of visibly discolored stormwater from the construction site or from the construction site to waters of the State, the permittee shall take immediate corrective action.

7. If there is a discharge of visibly discolored stormwater from the construction site to waters of the State, the permittee shall notify DEC by submitting a report within 72 hours of the discharge.

8. The On-site Plan Coordinator shall have a copy of the EPSC Plan and all amendments available at a central location on-site for the use of all those identified as having responsibilities under the EPSC Plan whenever they are on the construction site. If an on-site location is unavailable to store the EPSC Plan when no personnel are present, notice of the plan's location shall be posted near the main entrance at the construction site.

To request information on this authorization, or to report compliance concerns, please contact the Water Quality Division at (802) 241-3770 or write to:

VT DEC, Water Quality Division
103 South Main Street, Bldg 10 North, Waterbury, VT, 05671

See Reverse for Posting Requirements
Permittee Directions for Posting:

This notice shall be placed near the construction entrance at a location visible to the public. If displaying near the main entrance is infeasible, the notice shall be posted in a local public building such as the town hall or public library. For linear projects, the notice shall be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a public road).

See Reverse for Posting Requirements
Appendix E

General Permit 3-9010 for

- #3028-9010.A: BTV Master Stormwater Permit

Individual Stormwater Discharge Permit for


- #3845-INDS.A: Heritage Flight Aviation Campus Expansion Amendment
December 22, 2009

City of Burlington-Burlington International Airport
Attn: Heather Kendrew
1200 Airport Drive #1
South Burlington, VT 05403

Re: Authorization to Discharge Permit No. 3028-9010.A

Dear Ms. Kendrew:

Enclosed is your copy of an Amended Authorization to Discharge pursuant to General Permit 3-9010 Amended (May 2007), which has been signed by the Stormwater Program Manager of the Stormwater Management Section on behalf of the Commissioner of the Department of Environmental Conservation.

This authorizes the discharge of treated stormwater runoff from:
- the Burlington International Airport (BTV) north runway;
- the north end terminal expansion and concrete apron;
- parking lots, roofs and roads associated with expanded BTV parking facilities;
- the Pratt & Whitney Building;
- the Building 880 replacement;
- the South End Development Phase 2 Project; and
- the Quarry Overflow Parking Area.

The properties are located on Airport Drive, Army Guard Road, Eagle Drive and Aviation Avenue in South Burlington, Vermont and will discharge to an unnamed tributary of the Winooski River, groundwater in the Winooski River watershed, a wetland tributary to Muddy Brook, and groundwater in the Muddy Brook watershed.

Please read this authorization to discharge carefully and note the inspection and reporting requirements, and other operating conditions including payment of annual operating fees.

If you have any questions, please call me at (802) 241-1452.

Sincerely,

Vicki L. Hill, Environmental Technician
Stormwater Management Section

Enclosures

cc: Gregory Goyette, Stantec Consulting Services
    Peter Keibel, Act 250 District Coordinator, Essex Junction
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AMENDED AUTHORIZATION TO DISCHARGE UNDER
GENERAL PERMIT 3-9010 AMENDED (MAY 2007)

A determination has been made that the applicant:

City of Burlington - Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403
(Impervious area: 63.815 acres)

meets the criteria necessary for inclusion under General Permit 3-9010 Amended (May 2007). Hereafter the named applicant shall be referred to as the permittee. Subject to the conditions of General Permit No. 3-9010 Amended (May 2007), the permittee is authorized to discharge stormwater from the Burlington International Airport (BTV) facilities in South Burlington, Vermont as follows: (1) the BTV north runway to an unnamed tributary of the Winooski River previously described in General Permit Authorization 3028-9010 and Individual Permit No. 1-0839 discharge point 1 (S/N 001); (2) the north end terminal expansion and concrete apron to an unnamed tributary of the Winooski River and groundwater in the Winooski River watershed previously described in General Permit Authorization 3972-9015 (S/N 002); (3) parking lots, roofs and roads associated with expanded BTV parking facilities to an unnamed tributary of the Winooski River and groundwater in the Winooski River watershed previously described in General Permit Authorization 3028-9010 and Individual Permit No. 1-1580 (S/N 003-4); (4) the Pratt & Whitney Building located at 15 Eagle Drive to a wetland contiguous with Muddy Brook previously described in Individual Permit No. 1-1270 (S/N 005-6); (5) the Building 880 replacement located on Aviation Avenue to a wetland contiguous with Muddy Brook previously described in General Permit Authorization 3845-9015 (S/N 007); (6) the South End development Phase 2 project to a wetland contiguous with Muddy Brook previously described in General Permit Authorization 4026-9015 (S/N 008); and (7) the Quarry Overflow Parking Area to groundwater in the Muddy Brook watershed previously described in General Permit Authorization 3028-9015 (S/N 009).

Manner of Discharge:

S/N 001: Stormwater runoff from the airport runway via a network of catch basins and storm drains including grass-lined swales, a trench drain on the terminal apron, several dry wells and perforated storm drain pipe, then through a rip-rapped outlet, prior to discharge to an unnamed tributary of the Winooski River.

S/N 002: Stormwater runoff from the north end of the airport terminal and concrete apron via a closed system to a Vortechs/StormTech treatment system that discharges to groundwater, with overflow to an unnamed tributary to the
Winooski River. During periods of plane de-icing stormwater runoff will be
diverted to a pump station and disposed of in an underground infiltration system

Note: infiltrated discharges are covered under the VTDEC Underground
Injection Control Program.

S/N 003: Stormwater runoff from impervious surfaces associated with the deck
of the new garage, rental car lot, long-term lot, loop road extension, garage exit
ramps, and rental lot, via area drains, catch basins, grass swale and closed
system to an unnamed tributary to the Winooski River.

S/N 004: Stormwater runoff from impervious surfaces associated with the
employee and long-term parking lots (Catchment #2) via catch basins to a
closed system to an exfiltrating sand filter to groundwater in the Winooski
River watershed.

S/N 005: Stormwater runoff from the Pratt & Whitney building and parking area
via grassed swales to a collection system, then discharging to a wetland
tributary to Muddy Brook.

S/N 006: Stormwater runoff from the Pratt & Whitney access road via overland
flow then discharging to a wetland tributary to Muddy Brook.

S/N 007: Stormwater runoff from the BTV Building 880 replacement project
eastern rooftop and paved parking areas via closed piping system, and from
western rooftop and paved parking areas via grass channel to a closed piping
system, discharging to a wetland tributary to Muddy Brook.

S/N 008: Stormwater runoff from paved parking areas and rooftops via sheet
flow to grassed channels and pipes conveyed to an infiltration basin and
Vortechentics underground storage vault, then discharging to a wetland
tributary to Muddy Brook. Note: infiltrated discharges are
covered under the VTDEC Underground Injection Control Program.

S/N 009: Stormwater runoff from the expanded portion of the south end quarry
(0.105 acres of new impervious) via overland sheet flow to vegetated areas for
treatment in accordance with the Disconnection of Non-rooftop Runoff Credit
and then conveyed via a grass channel to the existing quarry discharging to
groundwater in the Muddy Brook watershed.

Compliance with General Permit 3-9010 Amended (May 2007) and this Authorization
The permittee shall comply with this authorization and all the terms and conditions of
General Permit 3-9010 Amended (May 2007), including the payment of annual operating
fees to the Department. A billing statement for such fees will be sent to the permittee
each year. The first year’s statement is enclosed. Any permit non-compliance, including
a failure to pay the annual operating fee, constitutes a violation of 10 V.S.A. Chapter 47
and may be grounds for an enforcement action or revocation of this authorization to
discharge.
Transferability
This authorization to discharge is not transferable to any person except in compliance with Part VI.D. of General Permit 3-9010 Amended (May 2007). A copy of General Permit 3-9010 Amended (May 2007) is available from the Department via the internet at http://www.vtwaterquality.org/stormwater/htm/sw_3-9010.htm

Changes to Permitted Development
In accordance with Part V.G. of General Permit 3-9010 Amended (May 2007), the permittee shall notify the Department of any planned development or facility expansions or changes that may result in new or increased stormwater discharges. The Department shall determine the appropriateness of continued inclusion under General Permit 3-9010 Amended (May 2007) by the modified development or facility.

Annual Inspection and Report
The stormwater collection, treatment and control system authorized herein shall be properly operated and maintained. An inspection shall be conducted between the conclusion of spring snow melt and June 15th of each year. The inspection shall evaluate the operation and maintenance and condition of the stormwater collection, treatment and control system. The permittee shall prepare an annual inspection report on a form available from the Department. The permittee shall submit an inspection report to the Department by July 15th of each year or by July 30th if performed by a utility or municipality pursuant to a duly adopted stormwater management ordinance.

Restatement of Compliance
Every 3 years, the permittee shall submit to the Department a written statement signed by a designer that the stormwater collection, treatment and control system authorized herein is properly operating and maintained. The first re-statement of compliance is due December 22, 2012. Failure to submit a designer’s restatement of compliance shall constitute a violation of General Permit 3-9010 Amended (May 2007) and may result in the revocation of this authorization to discharge.

Filing of this Authorization with Local Land Records
In accordance with Part VI.N. of General Permit 3-9010 Amended (May 2007), the permittee shall file a copy of this authorization to discharge in the land records within seven (7) days of its issuance and a copy of the recording shall be provided to the Department within fourteen (14) days of the permittee’s receipt of a copy of the recording from the local land records.

Rights to Appeal to the Environmental Court
Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The appellant must attach to the Notice of Appeal the entry fee of $250.00, payable to the state of Vermont. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also
serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available online at www.vermontjudiciary.org. The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).

Effective Date and Expiration Date of this Authorization
This amended authorization to discharge shall become effective on December 22, 2009 and shall continue until December 22, 2019. The permittee shall reapply for coverage at least sixty (60) days prior to December 22, 2019.

Dated at Waterbury, VT this 22nd day of December, 2009.

Justin G. Johnson, Commissioner
Department of Environmental Conservation

By Padraic Monks
Stormwater Program Manager
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July 6, 2009

Heather Kendrew
City of Burlington – Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

Re: Discharge Permit # 3028-INDS
    Burlington International Airport – AIP No. 3-50-0005-XX-2009

Dear Heather:

Enclosed is your copy of Discharge Permit # 3028-INDS which has been signed by the Director of Water Quality Division on behalf of the Commissioner of the Department of Environmental Conservation.

The permit authorizes the discharge of treated stormwater runoff from your proposed project, Burlington International Airport – AIP No. 3-50-0005-XX-2009 in South Burlington, Vermont, to Muddy Brook and to a Class 2 wetland contiguous to Potash Brook.

Please read this permit carefully and note the inspection, maintenance, and reporting requirements, and other operating conditions including operating fees.

Since we did not receive any public comments during the notice period, the final permit is unchanged from the draft that was placed on public notice.

If you have any questions, please call me at (802) 241-1418.

Sincerely,

Kevin Burke
Environmental Analyst
Stormwater Section

Enclosures

cc: Greg Goyette, Stantec
    Peter Keibel, Act 250 District Coordinator, Essex
STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STORMWATER DISCHARGE PERMIT
STORMWATER RUNOFF TO WATERS OF THE STATE

In compliance with provisions of 10 V.S.A. §§1264, 1264a, the Stormwater Management Rule for
Stormwater-Impaired Waters, the Stormwater Management Rule, and in accordance with "Terms and
Conditions" hereinafter specified,

City of Burlington, Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403
(Impervious area: 19.42 acres)

the permittee, is hereby granted permission to discharge stormwater runoff from reconstructed Taxiways
‘B’ and ‘C’, relocated Taxiway ‘J’ and newly constructed Taxiway ‘G’; AIP No. 3-50-0005-XX-2009,
located at the Burlington International Airport, 1200 Airport Drive, #1 in South Burlington, Vermont.
Stormwater from the project discharges to Muddy Brook and a Class 2 wetland contiguous to Potash
Brook.

1. **Expiration Date**: Five years from issuance date of final permit. Note: This permit, unless
   revoked, modified or suspended, shall be valid until the designated expiration date not
   withstanding any intervening change in water quality, effluent, or treatment standards, or
   classification of the receiving waters including groundwater. However, any such changed
   standard or classification, and any applicable requirement in a total maximum daily load
   (TMDL) for the receiving water, shall be applied in determining whether or not to renew this
   permit, and in determining the conditions of a renewed permit.

   The permittee shall reapply for a renewed discharge permit ninety days prior to the expiration
date of this permit.

2. **Revocation**: 10 V.S.A. §1267 provides as follows:

   The Secretary may, after notice and opportunity for a public hearing, revoke, modify or
   suspend this permit if it is found that the permittee submitted false or inaccurate information
   in its application or has violated any requirement, restrictions, or condition of this permit, or if
   there is any change in any condition that requires either a temporary or permanent reduction or
   elimination of the permitted discharge. The Secretary shall impose conditions as the Secretary
   deems necessary for regulating the discharges of a permittee whose permit has been revoked,
   modified or suspended. Revocation shall be effective upon actual notice thereof to the
   permittee.

3. **Operating Fees**: This discharge is subject to operating fees under 3 V.S.A. §2822. The
   permittee shall submit the operating fees to the Agency in accordance with procedures
   provided by the Secretary.
4. **Recording in Land Use Records**: The permittee shall record a one-page notice of issuance of this discharge permit in the local land records within fourteen (14) days of issuance of this permit on the form provided by the Secretary, per §22-312 of Stormwater Management Rule For Stormwater Impaired Waters. The permittee shall provide a copy of the recording to the Secretary within fourteen (14) days of the permittee's receipt of the copy of the recording from the local land records.

5. **Transfer of Permit**: This permit is not transferable without prior written approval of the Secretary. Provided all applicable fees under 3 V.S.A. §2822 have been paid, a permittee may submit a notice of transfer to the Secretary. The notice shall be submitted at least five (5) days prior to the proposed date of transfer. The notice shall state that the prospective permittee has adequate funding to comply with this permit. The permittee shall provide a copy of this permit to the new owner or tenant and inform him of the responsibility to make application for a permit which shall be issued in his name. Any failure to do so shall be considered a violation of this permit.

6. **Right of Entry**: The permittee shall allow the Secretary, or his or her authorized representatives, at reasonable times, upon presentation of credentials, to enter upon and inspect the permitted premises, and the stormwater collection, treatment and control system and to sample any discharge to determine compliance with this permit and to have access to and inspect and copy any records required to be kept pursuant to this permit.

7. **Receiving Waters**: Muddy Brook (S/N 001) and a Class 2 wetland contiguous to Potash Brook (S/N 002).

8. **Manner of Discharge**:

   **S/N 001**: Stormwater runoff from taxiway surfaces via sheet flow over designated vegetated disconnection areas, then overland flow discharging to groundwater, to a catch basin and pipe closed drainage system, or via conveyance swale, discharging to Muddy Brook.

   Stormwater runoff from taxiway surfaces via sheet flow for treatment in Grass Channel #1, with underdrain, routed to a catch basin and pipe closed drainage system, discharging to Muddy Brook.

   Stormwater runoff from runway and taxiway surfaces via sheet flow for treatment in Grass Channel #2, with underdrain, routed to a catch basin and pipe closed drainage system, discharging to Muddy Brook.

   Stormwater runoff from runway and taxiway surfaces via sheet flow for treatment in Grass Channel #3, with underdrain, routed to a catch basin and pipe closed drainage system, discharging to Muddy Brook.

   Stormwater runoff from taxiway surfaces via sheet flow for treatment in Grass Channel #4, with underdrain, routed to a catch basin and pipe closed drainage system, discharging to Muddy Brook.
Note: The VT DEC Stormwater Program’s Site Balancing Procedure for the Discharge of Stormwater Runoff from the Expansion or Redevelopment of Impervious Surfaces was utilized to meet applicable treatment standards in drainage area S/N 001, discharging to Muddy Brook. In addition, areas of impervious surface previously authorized under Discharge Permit #1-0839, drainage area S/N 003, were redeveloped, subject to the Agency’s 2002 Stormwater Management Manual, and are now covered by this discharge permit.

S/N 002: Stormwater runoff from taxiway surfaces via sheet flow over designated vegetated disconnection areas, then overland flow discharging to a catch basin and pipe closed drainage system, discharging to a Class 2 wetland contiguous to Potash Brook.


10. Volumes Permitted and Frequency of Discharge: Such volumes and frequency as required by the discharge specified in #8 above.

11. Approved Project Design: This project shall be constructed and operated in accordance with the following site plans and details prepared by Stantec and Campbell & Paris Engineers, and supporting information:

**Stantec**
Drawing No. 16, “Grading and Drainage Plan, Sheet 1 of 2,” dated 05/28/09;
Drawing No. 17, “Grading and Drainage Plan, Sheet 2 of 2,” dated 05/28/09;
Drawing No. 19, “Drainage Details,” dated 05/28/09;
Drawing No. 21, “Typical Sections,” dated 05/28/09;
Drawing No. 22, “Typical Sections and Pavement Details,” dated 05/28/09;

**Campbell & Paris Engineers**
Sheet 20 and 21, “Schedule 1 Grading & Drainage Plan,” both dated 5/14/09;
Sheet 36, “Pavement and Typical Sections & Misc. Details,” dated 5/14/09;

By reference, the above noted plans are made a part of this permit.

12. Maintenance and Maintenance Reporting Requirements:

a. The swales, and related stormwater collection, treatment and control system shall be maintained in good operating condition at all times and shall be inspected annually and cleaned as necessary to maintain design specifications. The inspections shall be conducted between the conclusion of spring snow melt and June 15th of each year.
b. Any sediment removed from the swales shall be disposed of properly in accordance with state and federal statutes and regulations.

c. By July 15 of each year the permittee shall submit a written report to the Department of Environmental Conservation, Water Quality Division, Building 10 North, 103 South Main Street, Waterbury, Vermont 05671-0408. This report shall include, at a minimum:

i. for the first report, an inspection and verification that the project was built in compliance with the Approved Project Design per #11 above;

ii. the dates and details of any cleaning and maintenance operations carried out in the preceding year;

ii. a narrative summarizing the results of any inspections conducted in the preceding year and highlighting any stormwater related problems encountered, and all remedial steps taken in response;

d. Should any erosional problems occur, the permittee is required to immediately correct any such problems.

e. Any basins, swales, or related stormwater devices used during construction for erosion control shall be inspected and cleaned to design specifications immediately after construction has been completed.

13. Description of Required Offset: In order to meet the statutory standard for new discharges set forth in 10 V.S.A. §1264a and the Stormwater Management Rule for Stormwater Impaired Waters, the permittee has demonstrated that the project area located in the Potash Brook watershed will not increase the pollutant load over existing conditions. This has been accomplished by treating runoff from existing impervious surfaces within the Potash Brook watershed project limits. This portion of the project achieves a net reduction in sediment loading to Potash Brook of 3466 pounds per year.

14. Personnel and Training Requirements: Such personnel and training as necessary to fulfill the requirements of #12 above.

15. Monitoring and Reporting Requirement: No monitoring required; reporting requirement as specified in #12 above.

16. Other Requirements:

a. Treated stormwater runoff is the only waste authorized for disposal under the terms and conditions of this permit. The discharge of any hazardous materials or hazardous waste into the stormwater management system is prohibited.

b. The issuance of this permit does not relieve the permittee from the responsibility to obtain any other local, state or federal permits required by law.
17. **Secretary’s Determination:** The Secretary has determined that the entire project meets the requirements of the Agency’s 2002 Stormwater Management Manual and does not increase the sediment or hydrologic load for the portion of the project discharging to the receiving stormwater-impaired waters. The Secretary has determined that the proposed discharge will not reduce the quality of the receiving waters below the classification established for them.

18. **Right to Appeal to the Environmental Court:** Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The appellant must attach to the Notice of Appeal the entry fee of $225.00, payable to the state of Vermont. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at [www.vermontjudiciary.org](http://www.vermontjudiciary.org) address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).

19. Dated at Waterbury, VT this _6th_ day of _July_, 2009

Justin G. Johnson, Acting Commissioner
Department of Environmental Conservation

By [Signature]

Peter LaFlamme, Director
Water Quality Division
February 9, 2010

Heritage Flight
c/o Christopher Hill
265 Aviation Avenue
South Burlington, VT 05403

Re: Discharge Permit # 3845-INDS.A

Dear Mr. Hill:

Enclosed is your copy of Discharge Permit # 3845-INDS.A which has been signed by the Director of Water Quality Division on behalf of the Commissioner of the Department of Environmental Conservation.

The permit authorizes the discharge of treated stormwater runoff from your proposed project, the Heritage Flight Aviation Campus Expansion project located at Burlington International Airport in South Burlington, Vermont. Stormwater from the project discharges to a class 2 wetland contiguous with Muddy Brook. This permit amends and replaces previously issued discharge permit 3845-INDS. The amended permit accounts for permit coverage of an additional 0.12 acres of new impervious surface associated with a fuel farm and ADF tank pad expansion at the same Heritage Flight Aviation Campus at the Burlington International Airport.

Please read this permit carefully and note the inspection, maintenance, and reporting requirements, and other operating conditions including operating fees.

Since we did not receive any public comments during the notice period, the final permit is unchanged from the draft that was placed on public notice.

If you have any questions, please call me at (802) 241-1418.

Sincerely,

Kevin Burke
Environmental Analyst
Stormwater Section

Enclosures

cc: Greg Goyette, Stantec, Inc.
Peter Keibel, Act 250 District Coordinator, Essex
STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STORMWATER DISCHARGE PERMIT

STORMWATER RUNOFF TO WATERS OF THE STATE

In compliance with provisions of 10 V.S.A. §1264 and the Stormwater Management Rule and in accordance with "Terms and Conditions" hereinafter specified,

Heritage Flight
265 Aviation Avenue
South Burlington, VT 05403
(Impervious area: 2.03 acres)

the permittee, is hereby granted permission to discharge stormwater runoff from the Heritage Flight Aviation Campus Expansion project located at Burlington International Airport in South Burlington, Vermont. Stormwater from the project discharges to a class 2 wetland contiguous with Muddy Brook. This permit amends and replaces previously issued discharge permit 3845-INDS. The amended permit accounts for permit coverage of an additional 0.12 acres of impervious surface associated with a fuel farm and ADF tank pad expansion at the same Heritage Flight Aviation Campus at the Burlington International Airport.

1. Expiration Date: Five years from issuance date of final permit. Note: This permit, unless revoked, modified or suspended, shall be valid until the designated expiration date not withstanding any intervening change in water quality, effluent, or treatment standards, or classification of the receiving waters including groundwater. However, any such changed standard or classification, and any applicable requirement in a total maximum daily load (TMDL) for the receiving water, shall be applied in determining whether or not to renew this permit, and in determining the conditions of a renewed permit.

The permittee shall reapply for a renewed discharge permit ninety days prior to the expiration date of this permit.

2. Revocation: 10 V.S.A. §1267 provides as follows:

The Secretary may, after notice and opportunity for a public hearing, revoke, modify or suspend this permit if it is found that the permittee submitted false or inaccurate information in its application or has violated any requirement, restrictions, or condition of this permit, or if there is any change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. The Secretary shall impose conditions as the Secretary deems necessary for regulating the discharges of a permittee whose permit has been revoked, modified or suspended. Revocation shall be effective upon actual notice thereof to the permittee.

3. Operating Fees: This discharge is subject to operating fees under 3 V.S.A. §2822. The
permittee shall submit the operating fees to the Agency in accordance with procedures provided by the Secretary.

4. **Recording in Land Use Records:** The permittee shall record a one-page notice of issuance of this discharge permit in the local land records within fourteen (14) days of issuance of this permit on the form provided by the Secretary, per §18-312 of Stormwater Management Rule. The permittee shall provide a copy of the recording to the Secretary within fourteen (14) days of the permittee's receipt of the copy of the recording from the local land records.

5. **Transfer of Permit:** This permit is not transferable without prior written approval of the Secretary. Provided all applicable fees under 3 V.S.A. §2822 have been paid, a permittee may submit a notice of transfer to the Secretary. The notice shall be submitted at least five (5) days prior to the proposed date of transfer. The notice shall state that the prospective permittee has adequate funding to comply with this permit. The permittee shall provide a copy of this permit to the new owner or tenant and inform him of the responsibility to make application for a permit which shall be issued in his name. Any failure to do so shall be considered a violation of this permit.

6. **Right of Entry:** The permittee shall allow the Secretary, or his or her authorized representatives, at reasonable times, upon presentation of credentials, to enter upon and inspect the permitted premises, and the stormwater collection, treatment and control system and to sample any discharge to determine compliance with this permit and to have access to and inspect and copy any records required to be kept pursuant to this permit.

7. **Receiving Waters:** Class 2 wetland contiguous with Muddy Brook.

8. **Manner of Discharge:**

**S/N 001:** Runoff from roadways and rooftops is conveyed by a closed collection system to a 36” reinforced concrete pipe which conveys the flow to the wetland contiguous with Muddy Brook.

**S/N 002:** Runoff from rooftop areas, including a green roof on Heritage Flight Hangar, is collected in a closed system and conveyed to a bioretention/detention basin for treatment and attenuation of peak flows. Stormwater is discharged from the basin into a stone-lined swale that runs along Eagle Drive. The stone lined swale conveys the runoff to POI #2. From POI #2, the runoff is conveyed underneath Eagle Drive to S/N 002 via an existing 24” pipe culvert.

The *Stormwater Site Balancing Procedure* was utilized to meet applicable treatment standards for this drainage area as follows: Runoff from additional existing impervious areas are provided treatment and detention to balance new impervious areas that discharge to S/N 001 and S/N 002 without treatment and detention.

9. **Wastes Permitted:** Stormwater runoff from S/N 001 through S/N 002 of the Heritage Flight Aviation Campus Expansion project after treatment from bioretention and dry detention basins in accordance with the manner of discharge specified in #8 above.
10. **Volumes Permitted and Frequency of Discharge:** Such volumes and frequency as required by the discharge specified in #8 above.

11. **Approved Project Design:** This project shall be constructed and operated in accordance with the following site plans and details prepared by Stantec, Inc. and drawn by Truecullins: (Sheet GP1, dated June 13, 2008; Sheet DD-1, dated June 13, 2008; Sheet DD-2, dated June 13, 2008; Sheet SK-C-13 (LP-1), dated October 22, 2009; and all supporting information).

By reference, the above noted plans are made a part of this permit.

12. **Maintenance and Maintenance Reporting Requirements:**

a. The stormwater collection, treatment and control system shall be maintained in good operating condition at all times and **shall be inspected annually and cleaned as necessary to maintain design specifications.** The inspections shall be conducted between the conclusion of spring snow melt and June 15th of each year.

b. Any sediment removed from the bioretention system, basins, or related stormwater collection, treatment, and control system shall be disposed of properly in accordance with state and federal statutes and regulations.

c. **By July 15 of each year the permittee shall submit a written report** to the Department of Environmental Conservation, Water Quality Division, Building 10 North, 103 South Main Street, Waterbury, Vermont 05671-0408. This report shall include, at a minimum:

i. for the first report, an inspection and verification that the project was built in compliance with the Approved Project Design per #11 above;

ii. the dates and details of any cleaning and maintenance operations carried out in the preceding year;

ii. a narrative summarizing the results of any inspections conducted in the preceding year and highlighting any stormwater related problems encountered, and all remedial steps taken in response;

d. Should any erosional problems occur, the permittee is required to immediately correct any such problems.

e. Any basins, grass channels, or related stormwater devices used during construction for erosion control shall be inspected and cleaned to design specifications immediately after construction has been completed.

13. **Personnel and Training Requirements:** Such personnel and training as necessary to fulfill the requirements of #12 above.
14. **Monitoring and Reporting Requirement:** No monitoring required; reporting requirement as specified in #12 above.

15. **Other Requirements:**
   
a. Treated stormwater runoff is the only waste authorized for disposal under the terms and conditions of this permit. The discharge of any hazardous materials or hazardous waste into the stormwater management system is prohibited.

b. The issuance of this permit does not relieve the permittee from the responsibility to obtain any other local, state or federal permits required by law.

16. **Right to Appeal to the Environmental Court:** Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The appellant must attach to the Notice of Appeal the entry fee of $250.00, payable to the state of Vermont. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. Address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).

17. **Dated at Waterbury, VT this _____day of _____February, 2010**

   Justin G. Johnson, Commissioner
   
   Department of Environmental Conservation
   
   By [Signature]
   
   Peter LaFlamme, Director
   Water Quality Division