



Village Manager's Office  
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Essex Junction, VT 05452

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March 25, 2015

Ms. Christy Witters  
Vermont DEC  
Watershed Management Section  
1 National Life Drive  
Montpelier, Vermont 05620-3522

Re: 2013 Report of General Activity  
General Permit 3-9014  
NPDES VTR 040000

Dear Ms. Witters:

Please accept this report of permit related activity for calendar year 2014 in compliance with the Village of Essex Junction MS4 Discharge Permit. Additional information above and beyond what is enclosed is available upon request.

Respectfully submitted,

A handwritten signature in blue ink that reads "James L. Jutras". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James L. Jutras  
Water Quality Superintendent

cc: Pat Scheidel, Village Manager

**2014 ANNUAL COMPLIANCE REPORT  
VILLAGE OF ESSEX JUNCTION  
STORMWATER MANAGEMENT  
PHASE 2 MS4  
GENERAL PERMIT 3-9014  
NPDES-VTR 040000**

The Village of Essex Junction Notice of Intent was submitted in 2012 under General Permit 3-9014 issued on December 5, 2012. This report of activity is submitted in accordance with the terms and conditions of the permit and covers activity ranging from January 1, 2014- December 31, 2014 for the six minimum measures.

The Joint Stormwater Coordinating Committee established in 2013 continues to explore collaborative and coordinated stormwater improvement work within the Essex/Essex Junction community. As the Lake Champlain TMDL develops this work will continue to ensure new requirements are met.

**4.H.1 Public Education and Outreach & 4.H.2 Public Involvement/Participation**

- Chittenden County Regional Stormwater Education Program (RSEP) and Chittenden County Stream Team (CCST) member.
  - RSEP Payment: \$5,000 CCST Payment: \$1,800
- Chair of RSEP and Co-Chair of CCST are Village staff.
- RSEP helped sponsored Connecting the Drops 2.0 event in Essex Junction.
- RSEP “Slow the Flow” campaign encouraging residents to practice stormwater BMP’s was published in the Essex Reporter.
- Water Quality Table at the Village Annual Meeting had 6 visitors
- Quarterly Village Water bills sent to residents provide a link to SmartWaterWays.org.
- Wastewater facility tours: 18 Virtual tour: 3
  - Tours include: a) discussion on best management practices for stormwater runoff, pet waste control, toxic chemical disposal, fertilizer use, yard waste disposal and car washing b) awareness to the connection between personal practices and responsibility in protecting regional water quality c) how wastewater and stormwater management improve water quality d) discussion on the Lake Champlain watershed and how our actions directly affect its’ water quality e) renewable energy in relation to water quality.
- Total Number of Bags On Board pet waste bags distributed:1480
  - 115 distributed at Village’s Annual Block Party
  - 42 distributed at Village’s Annual Meeting
  - Bags are purchased by each community and distributed through the Town and Village’s Offices with the highest volume given out during pet registration.
- Illicit Discharge brochures are maintained in public display racks at the Brownell Library and Village offices. A total of 14 were distributed.
- “Erosion and Stormwater Runoff Control for Residential Construction Projects” brochure was created and is handed out with development permits issued. **(See Appendix A)**
- Occasional stormwater related postings occur on Village Front Porch Forum neighborhoods. **(See Appendix B)**
- Village newsletters provide information on water quality issues when appropriate. The March newsletter mailed to homes and posted on the Village website included links to the smartwaterways and CCST websites.

- Water quality and stormwater management is noted in the Wastewater Treatment Plant and Water Quality Reports printed annually as part of the Village Annual Report.
- Friends of Winooski in collaboration with CCST continued to perform water quality testing on Indian Brook. TSS, turbidity, total phosphorus, total nitrogen and chloride were measured. (**See Appendix C**)
- Our Wastewater Treatment Facility (WWTF) biosolids land application program farm partner participated in the 1st Annual Vermont Water Quality Day on May 23, 2014.
- The Village in conjunction with the Town of Essex worked with two classes from Colchester and Essex High Schools to suggest water quality sample sites on Indian Brook, answer questions regarding water quality efforts and land use. Staff also presented to students about stormwater LID's and MS4 permit requirements.

Education and outreach efforts are summarized in **Appendix D and E** of this report. General compliance detail for public involvement is available from the Village of Essex Junction Water Quality Superintendent upon request.

#### **4.H.3 Illicit Discharge Detection and Elimination**

- Total number of IDDE complaints or discoveries: 7
- Number of IDDE door tags distributed: 20
- 4 out of the 7 illicit discharges into catch basins were excessive amounts of grass clippings or debris. These discoveries occurred on Prospect Street, Wilkinson Drive, Hillcrest Road and Upland Road. Evidence of debris was on catch basin covers or inside the basin. All debris was removed and illicit discharge door tags emphasizing "only rain down the drain" were distributed to the surrounding houses.
- Catch basin #1259 on Beech Street was discovered to have an illicit discharge on its cover. The material resembled thick white paint. No material was found in the basin or downstream. Illicit Discharge door tags emphasizing "only rain down the drain" were distributed to the surrounding houses.
- A private sewer service at 70 Park Street broke. The break was found in the lawn and did not directly discharge into the road or storm sewer. The break was repaired by a private contractor.
- Champlain Farms gas station located on Pearl Street had a diesel spill from a pump. Village wastewater staff initially responded. ANR Enforcement Division performed follow-up investigation.
- A Village employee attended "Identifying Illicit Wastewater Discharges" training with Vermont Rural Water Association.

#### **4.H.4 Construction Site Stormwater Runoff Control**

- See **Appendix F** for summary of construction site permits.
- The Planning Department, Water Quality Superintendent and Village Engineer review permit applications for potential impacts of site runoff and to ensure stormwater management is incorporated.
- Site visits by planning staff are part of every construction permit and certificate of occupancy processes.
- Proper disposal of waste construction materials from the Chittenden Solid Waste District (CSWD), RSEP home construction and painting fact sheets are included with every permit issued.
- Post Office Square: Encouraged additional onsite infiltration with a drainage pipe replacement project
- Number of "Ways to minimize construction site runoff" fact sheet distributed with permits: 60

- Number of projects disturbing greater than 1 acre land:5
- Number of projects disturbing less than 5 acres of land with greater than 1 acre impervious surface: 2
- Number of erosion control site visits/inspections: 23
- \$15.3 million maintenance upgrade at the WWTF was completed in August.
- Other major construction projects included the Essex Police Station on Maple Street, School Street road reconstruction infrastructure improvements, The Village Walk Development on Kiln Ext, Autumn Pond Development on Thasha Lane. In addition, condos at Whitcomb 2 & 3 continue to be built on existing planned infrastructure.
- Major projects are reviewed periodically for site stability. Any issues are brought to the attention of responsible parties.

#### **4.H.5 Post Construction Stormwater Management**

- Stormwater management files are maintained for all permitted and expired sites in the Village.
- Post construction stormwater management and future maintenance requirements are inherent in the design review provided by the Village and its Engineer.
- Staff performed construction engineer's inspection and as-built verification for all infrastructure annually. Maintenance and repairs are scheduled along with work required in permit areas.
- Monitoring and inspection for erosion control measures at Whitcomb 2/3 developments continues during construction. The Village has accepted this infrastructure, understanding that there will be incremental site development in accord with the original permit and that site modifications as directed by the Village.
- Wood's End Road was resurfaced and the sidewalk was reduced to one side of the street. The total amount of impervious surface removed from this project was 6,480 square feet.

#### **4.H.6 Pollution Prevention/Good Housekeeping for Municipal Operations**

- The Joint Stormwater Coordinating Committee formed between the Village and Town continues to work cooperatively on stormwater MS4 permit requirements and other related stormwater demands from the pending TMDL release. Continued work includes FRP development and joint ordinance/design standards review.
- Work continues annually on updating and improving catch basin, water line, sewer manhole and sewer line repair maps. These digitized maps are available for use in the field.
- Comprehensive system inspections of all catch basins were performed by staff and summer Town/Village interns. Emphasis was on system integrity, identification of map conflicts, maintenance/repair and cleaning catch basins as necessary. Findings of the inspectors were verified by the Water Quality Superintendent or Environmental Technician.
  - Number of catch basins cleaned: 120
  - Amount of tailings collected from catch basins and Vortech units: 60 yards
  - Catch basin tailings are collected, stockpiled and properly managed at a state approved waste management area. Piles were tested this year for various metals and other pollutants of concern. Results came back well under permit limits and are available upon request.
- The Vortech swirl separator units' installed at Five Corners North, Brookside and Fairview Farms are periodically inspected (30+/- times) by staff and regular preventative maintenance occurs. The units are cleaned annually.
- All public roads are swept several times a year. Note: Due to staff transitions in 2014 records on road miles swept and amount of material removed are missing or incomplete.

However Public Works confirmed sweeping occurred a similar amount of times as prior years

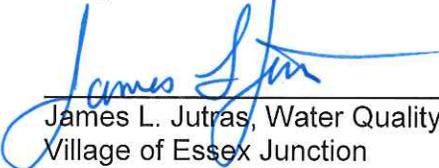
- Approximate number of road miles swept: 123
- Estimated amount of material removed by street sweeping: 157 yards
- The Wastewater Facility (WWTF) maintains a Sewage Spill Prevention Plan (SSPP) for the community in compliance with state regulation and is subject to periodic review.
- Public Works maintained Exempt Small Quantity Generator Status for hazardous materials. The WWTF maintained Exempt Small Quantity Generator Status for hazardous materials handling and disposal.
- The WWTF continues with monitoring and reporting for Tier 2 regulatory requirements for “Community Right to Know” compliance for all Village Departments.
- Sewer line maintenance continues. All sewer backups and causes are tracked. Problem areas are proactively monitored to prevent release of raw sewage to the waters of the State.
- The Village continues with liquid land application of certified biosolids with the Whitcomb Farm using subsurface injection equipment, as part of their nutrient management plan. The fertilizer (including manure) is injected into the root zone for stable fertilizer application and minimization of runoff. This leads to more efficient operations and reduced nutrient runoff potential into the Winooski River and Lake Champlain.
- Green Up Day 2014: 21 tires and 1720 pounds of trash collected
- Number of stormwater erosion complaints or issues by residents: 6
  - All resident complaints related to stormwater were investigated and resolved
- The Village and Town hired Watershed Consulting Associations in conjunction with Aldrich & Elliott to compile the flow restoration plans for Indian and Sunderland Brook. Staff conducted field investigations during the summer to work towards complying with the FRP requirements in the MS4 permit. Completed FRP’s are expected by Spring 2015.
- The Village in partnership with Town of Essex hired 4 summer interns to perform work related to MS4 permit requirements. Projects included inspections and justification of infrastructure, outfalls and expired permit areas.
- Employees participated in RSEP sponsored municipal workshop training on “Impacts of Salt in Vermont waters and Best Management Practices for Salt Spreading and Storage”.
- Employees attended US EPA online webinars relating to stormwater issues. Topics included the EPA National Stormwater, Road Salt Pollution Prevention Strategies, Best Practices for Green Infrastructure O&M.
- The Village continues to encourage green stormwater infrastructure into project designs and has successfully maximized infiltration/stormwater control on every major project brought before the Village in 2014.
- Stormwater program operating budget is in the process of being combined into the Town of Essex operating budget.
- **Appendix G** is “Chittenden MS4 Municipal Stormwater Program Accomplishments” as tracked by Jim Pease from the VT DEC.

### CERTIFICATION

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

Dated at Essex Junction, Vermont this 25<sup>th</sup> day of March, 2015.

Signature:   
Pat Scheidel, Village Manager  
Village of Essex Junction

Signature:   
James L. Jutras, Water Quality Superintendent  
Village of Essex Junction