

Town of Colchester



2010 Annual Report for:

**General Permit 3-9014
National Pollutant Discharge Elimination System (NPDES)
Number: VTR040000**

**For:
Storm Water Discharges From Small Municipal Separate Storm Sewer Systems
(MS4's)**

Submitted to:

**Vermont Agency of Natural Resources
Department of Environmental Conservation
Water Quality Division, Storm Water Management Program
103 South Main Street, Building 10 North
Waterbury, Vermont 05671-0408**

Submitted by:

**Town of Colchester
P.O. Box 55, 781 Blakely Road
Colchester, Vermont 05446**

Date Submitted:

March 31, 2011

**TOWN OF COLCHESTER
GENERAL PERMIT 3-9014
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NUMBER: VTR040000**

2010 ANNUAL REPORT

Section 4.2.1

Public Education and Outreach on Storm Water Impacts

The Town of Colchester has participated throughout 2010 in the Regional Storm Water Education Program, (RSEP) along with other MS4 communities from Chittenden County. Activities as identified in the MOU contained in the Town's NOI and application have been successfully completed, and are more specifically outlined in the Chittenden County Regional Storm Water Educational Program, Annual Review: 2010 Program Summary, Prepared by Marketing Partners, Inc.

The Town has also developed a storm water web site, which displays a variety of storm water related information, including the Town's MS4 Permit Plan. The information can be viewed at www.colchestervt.gov/PublicWorks/Stormwater.shtml.

Section 4.2.2

Public Involvement and Participation

1. Citizen volunteers established to complete stenciling of the second 50% of the storm water structures within the MS4 designated areas. – The Town of Colchester, working with volunteers from the community, completed an extensive stenciling program during the summer of 2004. Residents from the Hidden Oaks sub-division in Colchester worked with the Department of Public Works to stencil approximately 800, or about 98% of all storm water structures throughout the community. The Department purchased the necessary equipment and materials to perform the work, which was completed primarily through the use of curb markers. Actual stenciling on the pavement was used where no curbs existed. The volunteers included several young children from residential neighborhoods. Training, supervision and a general education on good water resource management was provided by the Town. The efforts received media coverage through the local new papers. This accomplished all of the required work under this activity for years two and three of the permit. In 2006, the last two remaining sub-divisions that had not yet been stenciled were completed by high school students as a school project. Regular inspection accomplished through basin cleaning, street sweeping and regular travel on the transportation system had revealed that only a limited number of curb markers required replacement.

These were done by DPW crews as they are identified. However, in 2007 a Cub Scout volunteer did assist the Town with these efforts.

At this point, regular inspections are concluding that many of the markers and stenciling now need to be replaced or updated. The Town is currently forming a partnership with both the Boy Scouts and Cub Scouts in Colchester. Building on the Boy Scouts of America, "Leave No Trace" program, it is anticipated that a partnership will be created between the Town and the scouts where upwards of 200 scouts will annually perform stenciling of the Town's storm water basins as part of their regular and ongoing curriculum. While stenciling is being done in each neighborhood, other scouts will go door to door handing out educational materials regarding their efforts as well as other storm water related issues. These materials will also serve to direct citizens to the RSEP web site for further information. The Town will provide all materials including the development of annual training exercises for the scouts. The goal is to develop a long term relationship of public involvement and participation, and more importantly, involve younger citizens to more effectively create an improved and sustainable understanding of storm water related issues within our community.

2. *Citizen volunteers established to participate in a stream corridor clean-up day and complete clean-up of 40% of Sunderland Brook* – In 2004, the Town of Colchester was able to secure funding through the Chittenden Solid Waste District, under the District's Community Cleanup Fund, to retain a consultant to perform field reconnaissance of the Sunderland Watershed. This effort resulted in the identification and inventorying of nine (9) illegal dumping sites within the watershed. All information was collected in GIS format and mapped for future clean up efforts.

From 2004 – 2006, the Town cleaned up six of the nine sites as described in previous annual reports, much of which involved the use of citizen volunteers. The sites that were cleaned up included sites A-1, A-2, A-3, A-4, J-1 and J-3 as identified in the 2004 field reconnaissance. In 2008, the Town focused on the three remaining dump sites. It was discovered that site J-2 had already been cleaned up and restored by others. The Town with its own forces cleaned up sites A-5 and J-4 using Local Community Implementation Grant funds awarded to the Town by the VDEC. Of the nine sites identified through the 2004 field reconnaissance, all sites have now been cleaned up with volunteer assistance through the first six years of the MS4 Program. Similar to the Town's stenciling program, volunteers in some cases included children supervised by adults, with their efforts published in the local news papers.

The Town has a significant volunteer base who regularly participates in activities aimed at preserving the community's abundant natural resources. During Green Up Day, a total of 341 Colchester citizens participated in clean up activities filling 685 trash bags. At the annual Green Up day picnic, the Town served the volunteers over 100 hotdogs. In total, Colchester citizens removed 4.4 tons of

trash, 189 tires and 1.9 tons of scrap metal. These figures represent some of the most extensive clean up efforts in the county.

For the Town's 2011 and future Green Up Day activities, the Town is working with its Conservation Commission to specifically target its clean up efforts toward high priority areas. These will include significant stream crossings of the Town's transportation system. Documentation of these clean up efforts, including the volume of trash removed will be organized for future reports.

3. Storm Water Watch Groups established within 100% of the sub-watersheds located within the MS4 designated areas – The Town has previously identified and mapped all eleven sub-watersheds within Colchester. This past summer, the services of an additional community volunteer was secured to serve on our watershed watch groups. This brings the total number of volunteers serving in this capacity to fourteen. The volunteers live in a total of eleven different sub-watersheds, resulting in 100% coverage. Initial educational materials were provided to each of the volunteers to help them understand the types of conditions that can contribute to water quality problems. Information is periodically sent to them on an as needed basis. Future efforts will include using the existing storm water watch group network to solicit the participation of additional citizens to serve in this capacity.

Section 4.2.3 Illicit Discharge Detection and Elimination

1. Update storm water system base map as required – This activity will be an ongoing process for the Town as additional development and associated storm water infrastructure is added. To maintain this data base, a three tiered approach has been developed to document 1) existing storm water infrastructure, 2) additional storm water infrastructure added through the Town's maintenance efforts and/or capital improvement projects, and 3) additional storm water infrastructure associated with new development.

Existing Storm Water Infrastructure - The Town has been the recipient of a \$1.5 million EPA Demonstration Grant. One of the many activities contained within the scope of work is a comprehensive update of the Town's storm water system mapping. This work is now completed and can be viewed on the Town's project website at www.colchesterwaters.net. colchestervt.gov

Future Town Installed Storm Water Infrastructure - The Department of Public Works continues to move toward additional in house GIS capabilities. In support of this approach, the Town has added two additional GIS Arc View work stations within the Public Works Department., and has obtained GPS data collection equipment.

Future Developer Installed Storm Water Infrastructure - The Town has approved amendments to its Sub-division regulations to require that developers

provide the Town with as-built information associated with new development, in digital form.

2. Develop and implement an Illicit Discharge Ordinance – The Town has developed and implemented an Illicit Discharge Ordinance. The ordinance regulates the contribution of pollutants to the MS4 from storm water discharges by any user, prohibits illicit connections and discharges to the MS4, and establishes legal authority to carry out the IDDE Plan, including conducting inspections, monitoring, and enforcement procedures to ensure compliance with the ordinance. The ordinance was adopted by the Colchester Select Board on July 26, 2005.
3. Perform inspection of all storm water outfalls within the MS4 designated area, and sample all outfalls with dry weather flows. – The Town completed inspections of all permitted outfalls with reporting requirements as identified within the Town’s IDDE Plan, and outfalls identified in an Outfall Reconnaissance Inventory completed for the Town of Colchester, by the Department of Environmental Conservation in March of 2006. A total of 37 storm water outfalls were inspected. Testing included the use of optical brighteners, as well as testing for pH. All results were negative.
4. Identify any illicit discharges and take the appropriate actions to correct all illicit discharges detected. – There were no illicit discharges detected during the outfall inspections conducted in 2009.
5. Update training for public employees as a part of the Town’s program for Pollution Prevention and Good Housekeeping. – In 2010, the Colchester Public Works employees received training at the Municipal Employees MS4 Training Workshop.
6. Provide updated educational materials to the Colchester Community Development Corporation for distribution to the business community. – Educational brochures developed for local businesses were distributed through the Town’s Community Development Office. Approximately 137 brochures were provided for distribution.
7. Accomplish additional educational outreach as outlined in Section 4.2.2.2.3 – The Town has accomplished additional educational outreach through the development and implementation of a storm drain stenciling program, stream corridor clean up initiatives, and the establishment of citizen storm water watch groups.
8. Document all actions. – The Town has established files to maintain all documents relating to the management of illicit discharges. A complaint system has also been established to receive citizen complaints through a storm water hotline. The hotline is posted on the Town’s web site. There were no calls recorded in 2010.

Section 4.2.4

Construction Site Storm Water Runoff Control

1. Conduct plan review for all land disturbances requiring permits under Planning and Zoning – The Town continues to perform plan review of all projects involving land disturbance as a part of the site plan review process and the issuance of building permits. In 2010, the Town reviewed and issued permits for a total of 481 projects involving land disturbances.
2. Inspect all locally permitted projects causing land disturbance for compliance to local erosion control ordinance, and take appropriate actions, including enforcement for violations. Report any suspected violations to ANR. – In 2010, Town inspectors performed 1,435 site visits associated with 481 permitted projects involving land disturbances to ensure compliance to local erosion control ordinances.

Section 4.2.5

Post-Construction Storm Water Management in New Development and Redevelopment.

1. Conduct development review process for all land disturbances requiring permits and require the appropriate post-construction storm water controls. - The Town continues to perform plan review of all projects involving land disturbance as a part of the site plan review process and the issuance of building permits. In 2010, the Town reviewed and issued permits for a total of 481 projects involving land disturbances. Projects were required to conform to the Town's storm water regulations.
2. Attach O&M permit conditions to approvals for all land disturbances that are not taken under public ownership – All permit conditions associated with projects involving land disturbance are included in the approved Findings of Fact and Order approved by the Development Review Board. This document becomes the instrument for enforcing the Board's approval.
3. Perform inspection activities as outlined in Section 4.2.5.2.3 and report any suspected violations to the appropriate jurisdiction. - In 2010, Town inspectors performed 1,435 site visits associated with 481 permitted projects involving land disturbances to ensure compliance to local erosion control ordinances.

Section 4.2.6

Pollution Prevention/Good Housekeeping for Municipal Operations

1. Maintain the improvements and procedures outlined in the MCAP program – On September 19, 2010, John Daly, Environmental Assistance Specialist within the Vermont Department of Environmental Conservation, conducted an inspection of the Town's Public Works Maintenance Facility. The Town is in compliance with each of the Direct Compliance Issues identified in the report. Spent diesel and gas fuel filters are being disposed of as outlined. The Town discontinued the use of clay absorbents several years ago. The Town has previously tested its sand blast waste for heavy metals with negative results. No changes in procedures or materials have been made since that time. Debris from both street sweeping and catch basin cleaning is currently being stored on site at the maintenance facility. The charges from landfills to accept the material as cover material have become cost prohibitive. The Town is currently developing a plan to gain approval of a Categorical Disposal Certificate from the Solid Waste Management Division.

2. Maintain the improvements and procedures outlined in the Multi-Sector General Permit for the Town's Public Works Maintenance Facility – The Town currently understands from the VANR Legal Council that MSGP's are not required for Public Works Garages. The Town has however completed several improvements which would be required under a MSGP if one were required. These include the covering of construction materials such as asphalt, manhole frames and covers, and scrap metal. The sand blasting area has been paved to facilitate the clean up of the waste material after each occurrence. A holding tank has been installed which is connected to the floor drains within the maintenance facility to capture wash water associated with cleaning equipment. The waste water is periodically removed and discharged into the Town's municipal sewer system. Voters of Colchester recently approved bonds to allow improvements to several Town buildings, including \$750,000 for the Public Works maintenance Facility. As a part of this project, a 3,720 square foot cold storage facility has been constructed, allowing much of the Town's equipment and construction materials to be placed under cover. This project also included the replacement of an aging salt storage facility.

3. Maintain operation and maintenance program as identified in Section 4.2.6.2.1 – The maintenance program as identified in Section 4.2.6.2.1 reflects the Town's standard operating procedures and basic maintenance requirements within the community. Current and future budget plans reflect a continuation of these activities.

4. Conduct employee training as specified in Section 4.2.6.2.1 – In 2010, the Colchester Public Works employees received training at the Municipal Employees MS4 Training Workshop.