



Town of Merrimack, New Hampshire

Department of Public Works
P.O. Box 940
Merrimack, New Hampshire 03054

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May 5, 2008

Certified Mail # 7002 0860 0007 6028 7018

Ms. Ann Herrick
US Environmental Protection Agency
1 Congress Street, Suite 1100 (CIP)
Boston, MA 02114-2023

RE: NPDES PII Small MS4 General Permit NHRO41018
Annual Report No. 5

Dear Ms. Herrick:

Enclosed is the fifth annual report for activities completed by the Town of Merrimack for the year April 2007 through March 2008 relative to the referenced permit.

Very truly yours,

David C. Lent, P.E.
Deputy Director of Public Works

DCL/rfs

Enclosures

cc: Thelma Murphy, USEPA
Keith R. Hickey, Town Manager
Edward L. Chase, P.E., Director of Public Works
Walter Warren, Community Development Director



Town of Merrimack uses recycled paper

Municipality/Organization: Town of Merrimack, NH

EPA NPDES Permit Number: NHR041018

MassDEP Transmittal Number: W-

Annual Report Number

& Reporting Period: April 1, 2007 – March 31, 2008

8
5/7/08

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2008)

Part I. General Information

Contact Person: David C. Lent

Title: Deputy Director of Public Works

Telephone #: (603) 424-5137

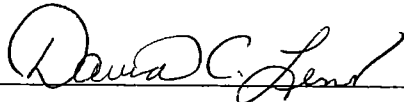
Email: dlent@merrimacknh.gov

Mailing Address: Merrimack DPW - 6 Baboosic Lake Road Merrimack, NH 03054

Certification:

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

Signature:



Printed Name: David C. Lent

Title: Deputy Director of Public Works

Date: April 2008

Part II. Self-Assessment

A self assessment of the progress made by the Town of Merrimack during Year 5 finds that focus was placed on completing the outfall mapping and screening program and developing a stormwater ordinance. The outfall program located 434 outfalls and 34 were screened for a variety of illicit discharge indicators. The sampling results showed that none of the outfalls were suspect for illicit discharges. The Town developed a draft stormwater ordinance (based on an example ordinance prepared by the NHDES), which is currently being reviewed by Town boards. Also, the Town continued with existing maintenance programs, provided support to local watershed groups and sent staff members to several training seminars and workshops that are applicable to the Phase II program.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1.1	Informational brochures for trash management and disposal of hazardous waste	DPW	Develop brochure by Spring of 2004, distribute to all residents by fall of 2004	The Town continues to produce and distribute informational brochures for proper household hazardous waste disposal, solid waste management (specific to Merrimack) and stormwater education (EPA “After the Storm” brochure). Approximately 1000 brochures were distributed in Year 5, with the focus being placed on household hazardous waste. Brochures are currently available at the Town’s transfer station and were also distributed to new residents. Approximately 30 new residents received brochures in Year 5. Additionally, the Baboosic Lake Association developed an informational brochure that was distributed to residents near the lake. Also, the Town participated in developing and distributing a 27 question survey for residents in the Stump Pond area to promote stormwater awareness and watershed protection techniques.	Continue to produce and distribute the brochures to Town residents. Copies will be available at Town Hall, DPW, Transfer station, Town Library and other Town facilities.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1.2	Classroom education	DPW	Have guided tour program of WWTF & highway garage available to students by end of year 1.	No tours were conducted this year due to lack of interest from the schools. As an alternative to this program, the Town worked with the Nashua Regional Planning Commission (NRPC) to develop a lesson plan to be integrated into the 6th, 7th and 8th grades curriculums. The program will consist of eight lessons that will include study of the water cycle and stormwater impacts specific to waterways in Merrimack.	The NRPC has scheduled a “teach the teacher” workshop for the Summer of 2008 to prepare Merrimack teaching staff to implement the new stormwater lesson plan in the schools curriculum during Permit Year 6. Tours of the WWTF and highway garage will be conducted if there is interest from the schools.

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1.3	Advertisements promoting BMPs to air on local cable station	DPW	Create sleds and secure airtime by fall of 2004. Advertisements to run monthly at a minimum.	Information on household hazardous waste disposal airs regularly on the Town's public access station. The Town purchased the EPA video "After the Storm" in Year 4 and intended to air the program on local cable stations. This 30 minute video produced by the EPA and The Weather Channel discusses watersheds and water pollution protection measures. The video was not aired during Year 5 due to coordination issues.	Continue to air information on household hazardous waste and air "After the Storm" video 12 times during Year 6.
1.4	Educational pamphlets provided to new residents.	DPW	Distribution of educational materials to begin by end of year 1 and be continuous	See BMP 1.1	See BMP 1.1

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1.5	Stormwater information provided on website	DPW	Develop website information, implement fall 2004.	Household hazardous waste information and the Town street sweeping schedule are currently posted on the DPW website. A subcontractor was procured to develop a new town website during Year 5. A series of complications in developing/launching the new website has delayed making the site live for the general public. It is anticipated that the site will come on-line during Year 6. Stormwater links on the new site will include: • A link to the Merrimack Village District (the Town's water supplier), which includes information on drinking water protection and landscaping BMPs. • A link to the main EPA and NHDES stormwater pages. • A link to the EPA "Stormwater Frequently Asked Questions" page. • A link to the EPA "After the Storm" page. • A link to the EPA "Adopt Your Watershed" page, which includes a self-test to determine if Town residents are minimizing their impact on the watershed. • A link to the Souhegan Watershed Community page, which includes data on water quality for local waterways.	It is anticipated that the website will be overhauled and operational by Fall 2008.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2.1	Storm Drain Stenciling	DPW	Stencil designed by Year 1, 80% catch basins stenciled by end of Year 2, stencil program to run annually	Stenciling and repainting of stencils that have faded continues. The Town currently coordinates the catch basin cleaning program with the catch basin stenciling program. Approximately 405 catch basins were cleaned during Year 5. It is estimated that approximately 2000 of the Town's catch basins have been stenciled to-date. The drop in number of catch basins cleaned from Year 4 to Year 5 is the result of an equipment failure that took several months to repair. A new vehicle has been purchased and will accelerate the rate of cleaning that the town achieves in Year 6.	Continue coordination of catch basin cleaning and stenciling. Catch basins stencils that have faded will be repainted as necessary.
2.2	Volunteer program for stream cleanup and water quality monitoring	Community Development	Work of Souhegan and Lower Merrimack local advisory committees to be monitored by the Town. Monitoring Data to be included in annual report to EPA.	Merrimack's continued support enabled water quality monitoring along the Souhegan and Merrimack Rivers. Data can be found at the following website: http://www.souheganriver.org/results.html The data is also included in The Merrimack Journal, a publication that is distributed weekly to every household. Additionally, the Town's Conservation Commission sponsors a water quality testing program (water clarity, chlorophyll and phosphorus) for the Naticook and Baboosic Lakes. Copies of the test results are available upon request at the Town Hall.	Continue association and support of watershed groups and the sampling program.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2.3	Greenbelt Program	Community Development	Greenbelt program is included in master plan, the Town is actively encouraging private participation	The Town continued to purchase properties in sensitive areas of Town through the Greenbelt Program for conservation purposes. Land purchased during Year 5 included four parcels totaling 96 acres. This purchase was strategic in protecting wetlands that are tributary to Baboosic Lake.	The Town boards will continue to work to acquire parcels to protect the watershed.
2.4	Support watershed organization	Community Development	Town will continue to solicit applicants for appointment with the local watershed organizations	The Town continues to support local watershed organizations such as the Souhegan Watershed Association, Lower Merrimack River Local Advisory Committee and the Nashua Regional Planning Commission. Currently the Town provides funding to support the organizations and donates staff time to attend meetings and support the various programs sponsored. Additionally, the Town has met with the Baboosic Lake Association to discuss implementation of stormwater BMPs to treat stormwater runoff prior to discharge to the lake.	The Town will continue to provide funding and staff time to support the local watershed associations.
2.5	Develop system for public communication	DPW	Appoint Contact person and establish communication methods by fall 2004	The Town established a contact person for the receipt of complaints and notices relative to stormwater violations. This person's direct phone line will serve as the stormwater phone line and will be posted on the Town's website to facilitate communication with the public.	Post the stormwater contact person and information on the new website.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3.1	Preparation of Master Drainage Map (delineation of municipal storm sewer system, drainage basins, outfalls & receiving waters)	DPW	Master Drainage Map is prepared by end of Year 4. Map is modified as needed annually.	The Town and its consultant walked all waterways and drove down streets in Town to locate and map existing stormwater outfalls. This information was incorporated into a master drainage map. The Town's consultant is currently developing a stormwater GIS that will further enhance this map.	Continue to develop stormwater GIS and add to master drainage map.
3.2	Storm sewer bylaw	DPW	Storm sewer bylaw in place by Year 3.	Review of the existing subdivision regulations and ordinances for the Town was conducted. The regulations currently prohibit illicit connections to the storm sewer system.	Continue to enforce existing regulations.
3.3	Qualitative observation of discharge at outfalls	DPW	100% major outfalls from developed areas are screened for pollutants by end of Year 2.	The field program located 434 stormwater outfalls in the Town. 34 of these outfalls were found discharging during dry weather and were flagged for follow-up screening measures.	BMP Complete.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3.4	Dry Weather screening of outfalls	DPW	100% major outfalls from developed areas are screened for dry weather flows pollutants by end of Year 1.	The 34 outfalls with dry weather flow were screened for pH, conductivity, temperature, ammonia, surfactants, E. Coli, fecal coliform, color and odor. All outfalls screened returned satisfactory results that did not indicate the presence illicit discharges to the storm sewer system.	BMP complete.
3.5	Develop program for the elimination of illicit discharges, if applicable.	DPW	Eliminate all known illicit discharges by end of Year 5, first permit period.	No illicit discharges were identified during the outfall screening program.	The Town will continue to monitor its stormwater outfalls as necessary. In the event that an illicit discharge to the drainage system is located, appropriate and standard industry practices will be utilized to identify and remove the source.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
4.1	Preparation of Town Ordinance to address: BMP erosion and sediment controls for all new construction, preparation of SWPPPs for land disturbances greater than 1 acre, building setbacks from waters of the state and disposal of discarded materials	Community Development	Complete ordinance and implement as allowable under State law	The Town's consultant reviewed existing planning and development regulations and prepared draft changes to the ordinance addressing BMP erosion and sediment controls for all new construction, preparation of SWPPPs for land disturbances greater than 1 acre, building setbacks from waters of the state and disposal of discarded materials.	The Town's consultant will finalize proposed new language to be presented to the Town Council by the end of Year 6. Approval of the proposed regulations by the appropriate board will be required.
4.2	Develop procedures for Site Inspection, enforcement and penalties for non-compliance	Community Development	Summarize inspections and violations	The Town's inspection staff continued regular site inspection on new construction. The Towns Erosion Inspector monitored 38 sites in Year 5 making approximately 109 inspection and maintenance visits. One violation was pursued with NHDES.	Continue to enforce the current procedures for site inspection and enforcement.
4.3	Appoint a contact person and establish communication methods by fall of 2005	Community Development	Develop system for public communication (for reporting violations) and track reports	See BMP 2.5.	See BMP 2.5

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
5.1	Revision to Town Site Plan and Subdivision review regulations to address: Structural BMPs for land disturbances for greater than 1 acre, and perpetual maintenance BMPs	Community Development	Regulations to be revised and adopted by fall of 2004.	The Town's consultant developed a draft stormwater ordinance to address structural and perpetual maintenance BMPs. The draft was based on the sample ordinance prepared by the NHDES and was tailored to suit the Town's needs. The draft is currently being reviewed by various Town boards.	The Town's consultant will finalize the proposed ordinance and present it to the Town Council by the end of Year 6. Approval of by the board will be required.
5.2	Develop procedures for review of structural BMPs	Community Development	To be part of revised regulations by fall 2004.	See BMP 5.1	See BMP 5.1
5.3	Promote open drainage systems and groundwater recharge through infiltration systems	Community Development	To be part of revised regulations by fall 2004.	See BMP 5.1	See BMP 5.1
5.4	Develop procedures for site inspection and enforcement	Community Development	Internal inspection procedures in place by fall of 2004.	See BMP 5.1	See BMP 5.1

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6.1	Prepare Operations and Maintenance program for storm sewer system	DPW	33% of structures are cleaned and inspected each year. O&M plan developed by end of Year 3. Plan to be revised as necessary.	The Town continued its current operations and maintenance program and good housekeeping measures. The following bullets detail specifics of the program from Year 5. • Street sweeping – 100% of streets were swept. • Catch Basin Cleaning – 405 cleaned • Salt continues to be stored in a new covered shed and salt use is limited in sensitive areas of Town. • All sand/salt spreaders were recalibrated for appropriate application rates prior to starting winter operations. • Vehicles are washed inside the DPW garage and rinse water drains to the Town sewer system. • Vehicle maintenance is performed inside the DPW garage. Employees are trained on spill procedures and spill kits are readily available. • Park maintenance continues with minimized use of herbicides, pesticides, fertilizers.	Continue existing program.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6.2	Implement employee Training Program to include: vehicle maintenance, building maintenance, oil recycling policy, calibration of salt spreaders, hazardous waste material storage, spill response and prevention and erosion control for new construction	DPW	Employee Training program to be developed by end of Year 1, and conducted annually for all DPW employees.	The employee training program that has been contracted by the DPW in the past was not conducted this year. However, staff members received training in the following courses: • Operations Manager attended a three day Winter Operations seminar through the Univ. of Wisconsin • UNH Technology Transfer courses attended: Winter Maintenance Fundamentals (1 attendee); Basic Winter Operations (1 attendee); Drainage, Drainage, Drainage- (1 attendee); Culvert Installation and Maintenance (4 attendees) • A full day in-house winter operations training session was held for all employees involved in plowing, sanding, salting – focused on the importance of applying appropriate materials and amounts depending on the specific weather conditions. • Factory training on proper calibration, maintenance and operation of our computer controlled sand/salt spreaders. (12 attendees) • Erosion Control Seminar (2 attendees) • Phase II Stormwater Training by CDM and CHMM (1 attendee)	Individual training through seminars will continue as opportunities to attend appropriate courses become available in Year 6.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Not Applicable					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

N/A