



TOWN OF HUDSON

Board of Selectmen



12 School Street Hudson, New Hampshire 03051 603/886-6024 FAX 603/598-6481

April 5, 2013

Ms. Glenda Velez - CIP
United States Environmental Protection Agency – Region 1
5 Post Office Square – OEP06-01
Boston, Massachusetts 02109-3912

Mr. Jeff Andrews
Wastewater Engineering Bureau
New Hampshire Department of Environmental Services
P.O. Box 95, 29 Hazen Drive
Concord, New Hampshire 03302-0095

Dear Sir and Madam:

In accordance with the General Permit requirements, enclosed is Hudson, New Hampshire's 2012-2013 NPDES Phase II Small MS4 General Permit Annual Report. If you have any questions, please feel free to contact Patrick Colburn, P.E., Town Engineer at (603)886-6008 or Steve Malizia, Town Administrator at (603)886-6024.

Thank you.

Sincerely,

HUDSON BOARD OF SELECTMEN

Richard J. Maddox
Chairman

Cc: Board of Selectmen
Town Administrator
Town Engineer

Municipality/Organization: Town of Hudson

EPA NPDES Permit Number: NHR041013

MaDEP Transmittal Number: W-

Annual Report Number

& Reporting Period: No. 10: March 2012-March 2013

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Patrick Colburn, P.E.

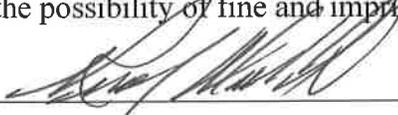
Title: Town Engineer

Telephone #: (603) 886-6008

Email: pcolburn@hudsonnh.gov

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: Richard J. Maddox

Title: Chairman, Board of Selectmen

Date: 4/8/2013

Part II. Self-Assessment

During the reporting period from March 2012 to March 2013, Hudson continued to work towards the objectives of the program. In January, 2013 the Town of Hudson hired Patrick Colburn, P.E. as the new Town Engineer. Patrick comes to Hudson from the private sector where he practiced Civil/Site Engineering in the field of land development. We hope that his background in stormwater management and erosion and sediment control will prove to advance the current stormwater program in the coming years.

During this reporting period, the Hudson Highway Department continued the catch basin cleaning program and cleaned structures along 47 of Hudson's public streets. The Highway Department also did a great job scheduling and further documenting their street sweeping efforts.

The Town of Hudson had regular representation and participation with the Nashua Regional Stormwater Coalition comprised of a small group of New Hampshire MS4 Communities. Recently, discussion has focused on the pending release of the 2013 General Permit, and its effect on our existing programs.

We will continue implementing existing BMP's for the coming year and will modify them as necessary once the new Permit is released and implemented.

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Next Permit Year
1-1 Revised	Install and Maintain Two Educational Kiosks	Town Engineer	Information posted and maintained/updated annually.	Two existing Kiosks, one at Musquash Reserve and one at Robinson Pond boat landing, contain stormwater education materials. Educational tri-folds are also available at Town Hall in two locations.	The sites will be maintained, with updates as necessary. Recently, a Boy Scout asked the Conservation Commission for permission to reconstruct the Musquash Reserve kiosk as his Eagle Scout Project.
1-2 Revised	Distribute Stormwater Quality & Environmental Information	Town Engineer	Document information being distributed and schedule of distribution.	Trifold handouts are provided at the Town Highway Department and at two locations at the Town Hall.	Continue to promote tri-fold information at existing sites. Update Town website with current information.
1-3 Revised	Add Stormwater Quality Information to Web Page	Town Engineer	Document articles/information put on web page.	Web page section for stormwater program was developed and included on the Town web pages in 2005.	Web page will be reviewed annually and updated appropriately.
1-4 Revised	Include Stormwater Quality Information in the Annual Town Report	Town Engineer	Provide two articles.	A stormwater annual report is provided by the Engineering Department for the Annual Town Report each year.	Continue with Annual Town Report updates.
1-5 Revised	Provide Education Information for Residents Around Robinson Pond	Robinson Pond Improvement Council	Distribute information to residents and maintain Robinson Pond kiosk.	The Conservation Commission in cooperation with the "Friends of Robinson Pond" assist with Public Education for residents surrounding the pond.	Continue program.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
1-6 Revised	Implement Stormwater Committee	Town Engineer, Town Planner, Road Agent, and Sewer and Drain Supervisor	Meet quarterly to plan and evaluate BMP implementation.	In January, the Town of Hudson hired a new Town Engineer from the private sector with experience in stormwater quality, erosion, and sediment control.	Establish regular meetings for the Stormwater Committee and improve/update the Town website.

1a. Additions

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2. Public Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
2-1	Hold Hazardous Waste Collection Days at Nashua	Nashua Regional Planning Commission (NRPC)	Regional hazardous waste collection days are held five times each year with drop-off located at the Nashua DPW garage.	Five hazardous waste collection dates are held annually. The Town's website provided an announcement of each date. These dates are also announced through an informational brochure, published by the Town of Hudson Highway Department. The summary of regional collection by Town is on file.	The scheduled Hazardous Waste Collection days are posted on the Town website.
Revised					
2-2	The Town Cleanup Days; leaves, brush, building materials, scrap metal collection at West Road Site	Road Agent	Twelve cleanup days per year.	In the same Hudson Highway Brochure noted above for BMP 2-1, Town cleanup dates are published. The brochure goes out to all Town residents and twelve days are scheduled per year.	Collection has been ongoing for many years and will continue. Mailing notice is updated each year.
Revised					
2-3	Provide a Hotline for Public Comment & Illicit Discharge Complaints	Town Engineer	Maintain web page and telephone hotline.	Hotline has been set up with the Fire Department Dispatch and a notice has been posted on the Town web site.	Maintain hotline number at the Fire Dept. dispatch and maintain communication between the Fire Dept. and Engineering/Highway responders.
Revised					
2-4	Continue Curbside Recycling Collection Program	Road Agent	Recycling collected.	Hudson utilizes curbside trash collection and recycling collections. Trash is collected weekly. Recycling every two weeks. All materials are collected in covered totes. This continues weekly. The Hudson Highway Department keeps ongoing logs of collections.	To continue the curbside trash collection and recycling collections weekly.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
2-5	Continue to Follow Public Notification Guidelines	Town Engineer	Guidelines followed.	Hudson follows a standard public notification process of Town committee meetings and public activities. The notices are published on bulletin boards and are posted on the Town web site calendar for meetings.	To continue notification activities.
2-6	Solicit Public Comment on Annual Report	Town Engineer	Annual report summarized and available for public comment.	No comments locally have been received.	The Annual Report will be kept on file for local public viewing at the Community Development Office. Its existence and location will be identified on the web page and public viewing and comments will be invited.
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
3-1	Map Outfalls and Receiving Waters	Town Engineer	By end of 5-year permit term mapping to be complete.	Outfalls were cataloged in 2006. This includes GPS coordinates, a description, and pictures of each location. Over 1,000 points have been cataloged, including outfall and sub-outfall locations and they are cross-referenced to watershed. Data is on computer disks and hard copies.	Develop watershed plans associated with individual outfalls.
Revised					
3-2	Develop Effective Storm Sewer Bylaws	Town Planner and Town Engineer	Bylaws developed and approved by Town.	Stormwater Regulations have been approved and adopted by Town Planning Board through a formal hearing process. The Regulations were adopted on February 7, 2007.	To continue to enforce the Stormwater Regulations.
Revised					
3-3	Dry Weather Screening of Outfalls	Town Engineer	Number of outfalls screened.	All outfalls were visually screened as part of the outfall location effort done in 2006 (See BMP 3-1). A total of 1,045 drainage outfalls were screened. Interns doing the work were trained by NHDES in basic visual illicit detection methods at the start of the outfall location process.	Develop a plan for routine screening, and commence effort. If discharges are found, we will attempt to locate the source and facilitate correction.
Revised					
3-4	Develop and Implement System for Elimination of Illicit Discharges	Town Engineer, Road Agent, and Highway Supervisor	Test, locate sources, and facilitate correction.	Hudson has the Sewer and Drain Division personnel who, through visual inspection and video camera (for pipe inspection), have and will continue detection and correction of illicit discharges.	Documentation of efforts will be catalogued.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
3-5	Continue Monitoring of Robinson Pond and Its Watershed	Robinson Pond Improvement Council	Annual reporting data for 11 sites along Robinson Pond and in watershed.	Monitoring has been undertaken since 2001. This is part of the “Volunteer Lake Assessment Program.” In addition, the Conservation Commission with support from the NHDES has facilitated diver assisted removal as well as chemical treatment of invasive plant growth in Ottarnic and Robinson Ponds.	To continue program. Copies of the New Hampshire Volunteer Lake Assessment Program are kept at the Engineering office.
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
4-1	Independent Engineering Company Reviewing Site Plans and Stormwater Controls	Town Engineer and Town Planner	Independent review of all plans.	For many years, the process of independent plan review has been in place. This has always included drainage and stormwater. Every private site project is processed through this review process. Files for each are maintained at the Engineering and Planning Offices.	To continue the program and incorporate updated Regulations.
Revised					
4-2	Draft and Present Bylaws to Require Erosion and Sedimentation Control Plans	Town Engineer and Town Planner	Draft and present bylaws.	The effort is part of BMP 3-2.	To enforce the approved Regulations.
Revised					
4-3	Draft and Present Bylaws to Require Waste Management Plan				
Revised	<i>Deleted 2005</i>				
4-4	Receive and Consider Public Comment.	Town Engineer	Maintain web page hotline for comments.	Hotline has been identified and advertised on the Town web page (see BMP 2-3).	Continue to solicit comments and evaluate any ideas.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Next Permit Year
4-5	Inspect and Enforce Control Measures at Construction Sites	Town Engineer and Engineering Inspector	Inspections conducted and documented.	The Town has an ongoing inspection process for subdivision and site plans. This includes ongoing inspection of stormwater and erosion control measures with documentation maintained at the Town Engineering Office. During the construction season, inspections are typically done at least weekly and after each significant rain event. Reports pertinent to stormwater management and erosion control are being taken to document problems and corrections. Copies of NOIs and Stormwater Management Plans are requested from developers and NOI status is checked on the EPA web site. Developers are reporting during the plan review process the intent to independently inspect in accordance with NOI and SWPPPs as required by EPA.	To continue the same effort with upgrades in effectiveness as technology allows.
4-6	Enforce Site Permits and Ordinances	Town Engineer, Inspector, Code Enforcement Office.	Permits and ordinances enforced.	In conjunction with BMP 4-5, stormwater management requirements and wetlands protection are monitored and enforced. Preconstruction meetings are required for most subdivisions and site plans. The Engineering Department and/or Code Enforcement Officer send out enforcement letters as necessary. Records are kept at the Community Development Office.	Continue notification, inspection, and enforcement program.
Revised					

4a. Additions

5. Post-Construction Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Next Permit Year
5-1 Revised	Continue to Allow "Open Space Development" – (Zoning Ordinance Article XI 334.47)		Ordinance on file.	The Open Space Development Ordinance has been the basis for several development projects done over the past several years and has been amended to increase open space.	The Ordinance will continue into the foreseeable future with possible amendment from time to time.
5-2 Revised	Draft and Present Bylaws Requiring Runoff Controls for New and Re-Development	Town Engineer	Finalize bylaws.	See BMP 3-2 and 4-2. Stormwater Regulations were adopted on February 7, 2007 and are in force.	Continue to review Regulations as necessary. Use Regulations on going for future construction in Town.
5-3 Revised	Recommend a BMP Manual for Use by Planners & Developers	Town Engineer	BMP manual selected.	NHDES Guidebook – Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire has been selected.	This manual is kept on file for reference with our Stormwater Management Plan. The policy we have subsequently adopted is to use the New Hampshire Stormwater Manual Volumes 1, 2, and 3, as published and amended by the NHDES. It is used for review of new subdivisions and site plans and is referenced to developers, contractors, and designers.
5-4	Develop Procedures for Adequate Long-Term Operations of Structural BMPs, and Minimization of Water Quality Impacts	Road Agent and Town Engineer	Existing structural BMPs, public and private, will be cataloged.	The cataloging of structural BMPs is done.	

Revised

5a. Additions

6. Good Housekeeping

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
6-1	Identify Sensitive Receptors	Town Engineer	Receptors identified and mapped.	Sensitive receptors are Ottaric Pond, Robinson Pond, and the Merrimack River. These have been mapped.	Sampling by the Lower Merrimack River Local Advisory Committee and the NH Volunteer Lake Assessment Program continues every year for these water bodies.
Revised					
6-2	Continue Employee Training Program	Department Heads	Continue annual training for Town personnel.	Training is completed by the various Dept. Heads, for their various disciplines. Training is passed on to support staff as necessary.	Continue routine training.
Revised					
6-3	Sweep Each Street Annually	Road Agent	Streets swept annually.	The Town-owned street sweeper operates continually spring, summer, and fall. All streets are swept at least once annually. Downtown urban areas are swept more frequently. Monthly logs are being maintained.	Continue program.
Revised					
6-4	Continue Annual Calibration of Deicing Compound Applicators	Road Agent	Calibration occurs annually.	This is an ongoing process with the Highway Department.	Continue Program
Revised					
6-5	Maintain Oil/Water Separator at DPW Garage	Road Agent	Inspect and Maintain. Wash water discharged to sewer and recycle used oil.	Oil/water separator is inspected at least twice per year and cleaned at least once per year. We have included oil recycling data to this program. Vehicles are washed inside the garage at the Police sally port, Highway Department, and private wash facilities.	Maintain process. Continue to educate personnel on vehicle washing regulations.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
6-6	Clean Each Catch Basin Once Every Three Years	Highway Supervisor and Road Agent	Clean catch basins.	The Highway Department has a long standing program for catch basin cleaning which is being continued. Maintenance logs have been kept since the Spring of 2004.	Continue program.
Revised					
6-7	Continue to Log Hazardous Waste Materials and Store Properly	Road Agent	Materials logged and stored.	Hazardous materials are stored at the Highway garage. MSDS sheets for the various materials are kept on file in the office of the Road Agent.	Continue program.
Revised					
6-8	Evaluate Physical Conditions, Site Design, and Best Management Practices to Promote Groundwater Recharge	Town Engineer, Road Agent, and Town Planner	Show evaluation of applicability and inclusion where possible for future development.	This is being encouraged in new development where applicable, in accordance with the New Hampshire Stormwater Manual. Design plans for development and review documentation are on file at the Community Development Department.	To continue inclusion as applicable.
Revised					

6a. Additions

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Year
	Not Applicable				
Revised					

7a. Additions

7b. WLA Assessment
Not Applicable

Part IV. Summary of Information Collected and Analyzed

Information for the following is available at the Hudson Engineering Department:

- “New Hampshire Volunteer Lake Assessment Program 2011 Merrimack Valley Regional Report”
- “Fanwort & Milfoil Control and Water Quality Monitoring Programs for Otarnic Pond and Robinson Ponds”
- Handout to residents from the Hudson Highway Department regarding the “New Curbside Trash and Single Stream Recycling Program!”
 - This document also provides information relative to Town clean-up days, curbside yard waste collection, and hazardous waste collection
- Tri-fold handout regarding “Nonpoint source water pollution”
- 2012 Street Sweeping log provided by the Hudson Highway Department
- Maintenance invoices from CYN Environmental Services for the cleaning and inspection of the oil/water separators at both the Hudson Highway Department and Central Fire Station
- Trash Recycling Tonnage Report provided by the Hudson Highway Department
- Catch Basin cleaning report (by Street) provided by the Hudson Highway Department

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	1	No
Annual program budget/expenditures	\$1,500	Unknown

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	20%	Unknown
Stormwater management committee established	Yes	Yes
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	Yes	Unknown
Household hazardous waste collection days		
▪ days sponsored	4	5
▪ community participation	(%)	10
▪ material collected	(tons or gal)	Unknown
School curricula implemented (initiated)	Yes	Unknown

Legal/Regulatory
(Status under Review)

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory mechanism status (indicate with "X")				
▪ Illicit discharge detection & elimination				X
▪ Erosion & sediment control	X			X
▪ Post-development stormwater management	X			X
Accompanying regulation status (indicate with "X")				
▪ Illicit discharge detection & elimination				X
▪ Erosion & sediment control	X			X
▪ Post-development stormwater management	X			X

Mapping and Illicit Discharges

Outfall mapping complete		100%	100
Estimated or actual number of outfalls		1132	1132
System-wide mapping complete		100%	100
Mapping method(s)			
▪ Paper/Mylar		100%	100
▪ CADD		100%	100
▪ GIS		100%	50
Outfalls inspected/screened		1132	Unknown
Illicit discharges identified	(#)		0
Illicit connections removed	(#)		0
	(est. gpd)		0
% of population on sewer		25%	20
% of population on septic systems		75%	80

Construction

Number of construction starts (>1-acre)	1	<5
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%	100
Site inspections completed	100%	100%
Tickets/stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	4	Unknown

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	75%
Site inspections completed	(10%)	10
Estimated volume of stormwater recharged	(gpy)	Unknown

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1x/3 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1x/3 years
Total number of structures cleaned	(750)	Unknown
Storm drain cleaned	(LF or mi.)	Unknown
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Unknown
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Beneficial Use
Cost of screenings disposal	(\$)	Unknown

Average frequency of street sweeping (non-commercial/non-arterial streets)	(2 times/yr)	1 - 2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(2 times/yr)	1 - 2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	Unknown
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Beneficial use
Cost of sweepings disposal	(\$)	Unknown
Vacuum street sweepers purchased/leased	1	Owned
Vacuum street sweepers specified in contracts	(y/n)	0

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	unknown
▪ Herbicides	(Lbs. or %)	unknown
▪ Pesticides	(Lbs. or %)	unknown

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	75%
Pre-wetting techniques utilized	(y/n)	Yes
Manual control spreaders used	4	Yes
Automatic or zero-velocity spreaders used (calibrated annually – checked regularly)	(y/n)	calibrated
Estimated net reduction in typical year salt application	(Lbs. or %)	Heavy snow year
Salt pile(s) covered in storage shed(s)	Yes	Yes
Storage shed(s) in design or under construction	Finished	N/A