



**TOWN OF HUDSON
DEPARTMENT OF PUBLIC WORKS**

1 MUNICIPAL DRIVE
HUDSON MA 01749
TEL. 978 562 9333
FAX. 978 568 9612

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MAY 4 2009

April 28, 2009

Glenda Valez
U.S. Environmental Protection Agency
1 Congress Street Suite 1100 (CIP)
Boston, MA 02114-2023

RE: NPDES Phase II Small MS4 General Permit Annual Report
W-036113- Town of Hudson, MA

Dear Ms. Herrick:

Attached please find a copy of the annual report for the Town of Hudson, Massachusetts for 2009 as required by the NPDES Phase II Small MS4 General Permit. As required, a copy of the Annual Report has also been sent to the Massachusetts DEP.

Please do not hesitate to contact me if you have any question or comments at (978) 562-9333.

Sincerely,

Max Kamel
Assistant Director of Public Works

Attachments

Cc: Paul Blazar, Executive Assistant
Anthony Marques, DPW Director



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April 28, 2009

Mr. Fred Civian
Massachusetts Department of Environmental Protection
One Winter Street – 5th Floor
Boston, MA 02108

RE: NPDES Phase II Small MS4 General Permit Annual Report
W-036113- Town of Hudson, MA

Dear Mr. Civian:

Attached please find a copy of the annual report for the Town of Hudson, Massachusetts for 2009 as required by the NPDES Phase II Small MS4 General Permit. As required, a copy of the Annual Report has also been sent to the EPA.

Please do not hesitate to contact me if you have any question or comments at (978) 562-9333.

Sincerely,

Max Kamel
Assistant Director of Public Works

Attachments

Cc: Paul Blazar, Executive Assistant
Anthony Marques, DPW Director

Municipality/Organization: Hudson, MA

EPA NPDES Permit Number: MA 041198/MaDEP

MaDEP Transmittal Number: W-036113

**Annual Report Number
& Reporting Period:** No. 4: March 08-March 09

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Max Kamel **Title:** Assistant DPW Director

Telephone #: (978) 562-9333 **Email:** Mkamel@TownofHudson.org

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: Paul Blazar

Title: Executive Assistant

Date: April 28, 2009

Part II. Self-Assessment

The Town of Hudson has completed the required self-assessment and has determined that our municipality with all permit conditions.

Note: Our BMP numbers assigned to the various tasks are identified as follows:

BMP 6-1 (Year – control measure) – This would be year #4 for control measure #1 Public Education

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 Revised	Storm Water Flyer to Community Residents	DPW and SuAsCo	Flyer distributed to 75% of residents and compile survey results	Results of the survey were received and analyzed. Information and flyer were displayed and distributed at DPW office.	N/A
2-1 Revised	Storm Water Lesson Plan for 5 th Grade Students	Hudson School Dept and SuAsCo	Develop & distribute lesson plan to 5 th grade teachers	N/A	N/A
3-1 Revised	Storm Water Flyer to Community Businesses	DPW and SuAsCo	Flyer distributed to 50% of businesses & have stormwater logos displayed at business	Obtained window stickers to be displayed by business owners. Also the Town obtained flyer and DVD from SuAsCo titled "Stormwater Flyer for Businesses in Hudson"	Distribute flyers to businesses and have stormwater logos displayed at businesses
4-1 Revised	Storm Water Media Campaign	DPW and SuAsCo	Media info packet delivered to local media and generate 4 press releases for major media outlets	Developed a media info packet and generate press releases in corporation with SuAsCo.	Continue development with the local media outlets. Display posters and distribute cards at Town Hall to educate residents about Stormwater in corporation with SuAsCo.
5-1 Revised	Storm Water Video	DPW and SuAsCo	Show storm water video @ 1 public meeting and on local cable stations	Obtained Video titled "After the Storm" from EPA and it was aired on local cable channel.	Obtain Video titled "Stormwater Matters" from SuAsCo Watershed to be aired on local cable channel. Hudson High School students operate the local channel broadcasting.
Revised					

1a. Additions

3a-1	Develop Storm Water Web Site	DPW and IT Dept.	Develop a storm water page on the Town web site by spring of 06	worked on the DPW section of the Town website to include storm water information links.	Continue working on the DPW section of the Town website to include stormwater information links
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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
1-2 Revised	Storm Water Traveling Display	DPW and SuAsCo	Circulate display for 3 months in permit year #1	Displayed information at Town Meeting and other public activities such as RiverFest.	Continue to display at Town Meeting and other public activities such as RiverFest.
2-2 Revised	Storm Water Poster Contest for 5 th Graders	SuAsCo & Hudson School Dept	Contest is held and entries are received, judged, & displayed	N/A	N/A
3-2 Revised	Storm Water Photo Contest for High School Students	SuAsCo & Hudson School Dept.	Contest is held and entries are received, judged, & displayed	N/A	N/A
4-2 Revised	Storm Water Summit Special Event	DPW & SuAsCo	Hold local or multi-community summit & encourage community to attend	SuAsCo sponsored and promoted stormwater awareness during an event they sponsored	N/A
5-2 Revised	Storm Water Super Summit and Conduct an Evaluation & Assessment of Public Stormwater Awareness	DPW & SuAsCo	Municipal participation in Summit, self-test distributed to 75% of residents, compile test results	Task was accomplished in 2006, one year ahead of schedule	N/A
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1-3 Revised	Identify & map outfalls and receiving waters	DPW	Map all outfalls and incorporate into GIS	Identified approximately 99% of the outfalls, catch basins, and drain manholes by GPS and integrated into GIS. 95% of the drain pipes were connected.	Continue to update map of the drainage system. Locate any missing features and add them to GIS.
2-3 Revised	Database of existing structures	DPW	Locate all structures and develop rating & maintenance plan	Have started a database on all structures and outfalls identified and develop a module to adapt to the GIS system	Continue compiling the database
3-3 Revised	Develop and implement a Storm water ordinance	DPW & Town Boards	Have an ordinance adopted within 12 months	The Town adopted (added) the “Regulations Governing Illicit Connections and Discharge to the Municipal Storm Drain System” to the Board of Health Rules and Regulations (copy attached). Town also adopted “Floor Drain Regulations” (copy attached).	Enforce the implemented Regulations
4-3 Revised	Inform Public, employees, businesses of illicit discharges	DPW	To inform who, what, where, and how to detect an illicit discharge	Informed personnel handling Stormdrain work to contact DPW Office for any illicit, pollution, or any suspicious activity. DPW worked with the Board of Health and Conservation Commission to immediately take actions and/or resolve the problem.	Continue coordination with different Commissions and Boards to maintain a safe and healthy community.
5-3 Revised	Develop & implement an illicit discharge plan	DPW	Review existing mechanisms and determine how to regulate illicit discharges and develop a bylaw	Worked with many instances during the year with Fire Dept, Board of Health and Conservation Commission to investigate and resolve illicit discharge problems. Continue working toward the implementation of the written plan.	Continue working with Fire Dept, Board of Health and Conservation Commission to investigate and resolve illicit discharge problems. Continue working toward the implementation of the written plan.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1-4 Revised	Sediment & Erosion Control Ordinance	DPW & All Boards	Have an ordinance for erosion control within 12 months	The Town adopted (added) "Rules and Regulations Governing Construction, Post Construction, Erosion and Sediment Control for Stormwater Management Plan of new Development (Section 4.9.4.7)" to the "Regulations Governing the Subdivision of Land". The adopted regulations were based on the Office of Massachusetts Attorney General guideline sample on their website.	Enforce the implemented Regulations
2-4 Revised	Develop procedures for site plan review	DPW & All Boards	All construction activities to submit plan for review prior to start of construction	Internal Traffic Committee (ITC) reviewed all new development/site plans. ITC involved most of the Town Departments. Planning Board has procedure to request, design implement, maintain and enforce erosion control measures for all site plan and development projects.	Continue the process to review and all new site plan and assure their compliance with Stormwater Regulations.
3-4 Revised	Procedures for site inspections and enforcement	DPW & All Boards	Develop new procedures and documentation format	The new regulations mentioned on Item 1-4 included the procedure for site inspection and enforcement.	Continue enforcing new regulations implemented in 2008.
4-4 Revised	Sanctions to ensure compliance	DPW & All Boards	To establish fines and penalties for non-compliance	Planning Board has the authority to enforce and stop work orders against any violation of the Board Regulations which will include regulations, if adopted on item 1-4	Continue enforcing, fine, and penalize any violator the new regulations implemented in 2008.
5-4 Revised	Require control of waste from construction sites	DPW & Building Dept.	Develop a Management Plan aimed at recycling	Planning Board continued the Control and enforcement of any waste produced from any construction site.	Continue Control/enforcement work by Planning Board and Conservation Commission. Work with both Boards above to develop a management plan

4a. Additions

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
1-5 Revised	Post Construction Ordinance	DPW & All Boards		The Town adopted (added) "Rules and Regulations Governing Construction, Post Construction, Erosion and Sediment Control for Stormwater Management Plan of new Development (Section 4.9.4.7)" to the "Regulations Governing the Subdivision of Land".	Enforce the implemented Regulations
2-5 Revised	Long-Term O&M of BMP's	DPW		Continued working toward the implementation of the maintenance plan.	Communicate with the Planning Board to work toward the implementation of the maintenance plan.
3-5 Revised	Inventory of all BMP's within Town jurisdiction	DPW		Developed a database program to manage, share information between departments and maintain records and of private sewerage database Management System.	Develop a database program to manage, share information between departments and maintain records and of private sewerage database Management System. Work toward developing a database of Town BMP's.
Revised					
Revised					
Revised					

5a. Additions

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
1-6 Revised	Employee Training	DPW	Inform employees on what our goals are with this permit	Continued updating employees on the progress of the permit	Continue updating employees on the progress of the permit
2-6 Revised	Municipal Vehicle Wash Area	DPW	To bring our wash area into compliance	N/A	N/A
3-6 Revised	Material Management	DPW	Inventory and properly store all material used at DPW	DPW maintained a contract to dispose Hazard material such as tires, waste oil and others through professional and specialized companies. The Hazardous Waste Day was sponsored by the Town Board of Health.	DPW will continue to maintain a contract to dispose hazard material such as tires, waste oil and others through professional and specialized companies.
4-6 Revised	Catch Basin Cleaning Disposal Plan	DPW	Catalog and dispose of material from CB's properly	Town cleaned 100% of the Town catch basins in 2007 (Except for the ones which could not be opened or have elbows, which the Town DPW added to the list to be cleaned using the VAC Truck. DPW used VAC truck to clean catch basins that encountered problems during the year after it has been cleaned once.	Continue cleaning 100% of the Town catch basins in 2008. DPW continue using the VAC truck to clean catch basins that encountered problems during the year after it has been cleaned once.
5-6 Revised	Stream Cleanup Day	DPW, Community, SuAsCo	To remove all debris from the rivers and banks	Cleaned Assabet River and expanded the days and waterways to be cleaned. Central Mass Mosquito Control Project cleaned several streams and brooks.	Continue cleaning Assabet River and other brooks and waterways. Continue communication with CMMCP to
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1-7 Revised	Installation of leaching catch basins using a S319 Grant (Lake Boon)	DPW	To install CB's and eliminate point source discharges	Completed 100% of the installation of leaching CB's in 2006/2007	N/A
2-7 Revised	Educational Pamphlets	DPW & Board of Health	To distribute flyers to encourage inspection and improvement of septic systems around Lake Boon	Continued educating residents and volunteers and gave educational pamphlets during the cleaning of the Assabet River and other waterways.	Town continues to distribute educational pamphlets through the Board of Health and Town Clerk Offices.
Revised					

7a. Additions

7b.

Part IV. Summary of Information Collected and Analyzed

We have not started any water quality test in general at this time. The recreation department does test the water at the Town Beach on Fort Meadow Reservoir – Centennial Beach. Testing results are attached and included in this report.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	\$80,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	2500
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y 6 Miles
Household Hazardous Waste Collection Days		
<ul style="list-style-type: none"> ▪ days sponsored ▪ community participation ▪ material collected Haz. Waste days are conducted by Intel and BP Trucking not Town 	(#) (%) \$	0 N/A 14,000
School curricula implemented	(y/n)	Y

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination	N	Y	N	N
▪ Erosion & Sediment Control	Y	Y	Y	Y
▪ Post-Development Stormwater Management	N	Y	Y	Y
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination	N	Y	N	N
▪ Erosion & Sediment Control	Y	Y	Y	Y
▪ Post-Development Stormwater Management	N	Y	Y	Y

Mapping and Illicit Discharges

Outfall mapping complete	(%)	99		
Estimated or actual number of outfalls	(#)	24		
System-Wide mapping complete	(%)	99		
Mapping method(s)				
▪ Paper/Mylar	(%)	85-90		
▪ CADD	(%)	99		
▪ GIS	(%)	99		
Outfalls inspected/screened	(# or %)	40%		
Illicit discharges identified	(#)	0		
Illicit connections removed	(#) (est. gpd)	0		
% of population on sewer	(%)	80		
% of population on septic systems	(%)	20		

Construction

Number of construction starts (>1-acre)	(#)	1
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	2

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100
Site inspections completed	(# or %)	100
Estimated volume of stormwater recharged	(gpy)	N/A

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	2529
Storm drain cleaned	(LF or mi.)	500 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	60+/-
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Beneficial use
Cost of screenings disposal	(\$)	7500

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	30
Qty. of sand/debris collected by sweeping	(lbs. or tons)	6000

Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Beneficial use
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	N

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	30%
▪ Herbicides	(lbs. or %)	30%
▪ Pesticides	(lbs. or %)	30%

Anti-/De-Icing products and ratios	% NaCl	15%
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	85%
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	0
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N/A