



**TOWN OF HUDSON
DEPARTMENT OF PUBLIC WORKS**

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

P

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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TEL. 978 562 9333

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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 | | | | | |
| 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 |
|------|------------------------------|------------------|---|---|---|

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

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|--|--|--|--|--|--|
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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

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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

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|--|--|--|--|--|--|
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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

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|--|--|--|--|--|--|
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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

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|--|--|--|--|--|--|
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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

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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 |
| | | |