

April 30<sup>th</sup>, 2009

U.S. Environmental Protection Agency  
Water Technical Unit  
P.O. Box 8127  
Boston, MA 02114

P

Re: Town of Randolph, Massachusetts  
NPDES PII Small MS4 General Permit Annual report

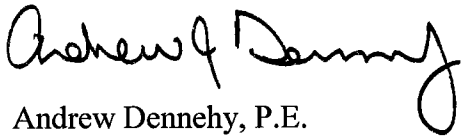
MAY - 4 2009

To Whom It May Concern:

On behalf of the Town of Randolph, Massachusetts, we are pleased to submit the NPDES PII Small MS4 General Permit Annual Report for the period March 2008 to March 2009, for your use.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,  
BETA Group, Inc.



Andrew Dennehy, P.E.  
Senior Project Engineer

encl.

**Municipality/Organization:** Town Of Randolph, MA

**EPA NPDES Permit Number:** MA 041055

**MaDEP Transmittal Number:** \_\_\_\_\_

**Annual Report Number  
& Reporting Period:** No. 6: March 08-March 09

MAY - 4 2009

## NPDES PII Small MS4 General Permit Annual Report


### Part I. General Information

**Contact Person:** David Zecchini **Title:** Superintendent-DPW

**Telephone #:** 781-961-0940 **Email:** dzecchini@randolph-ma.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:** Paul Connors

**Title:** Chairman - Board of Selectmen

**Date:** 4-30-09

## **Part II. Self-Assessment**

The Town of Randolph completed its Storm Water Management Plan (SWMP) in May 2004. While some of the Best Management Practices (BMPs) identified in the Notice of Intent (NOI) and the SWMP have been conducted, more will be initiated during Year 7 of the permit period. The Board of Public Works attempted to secure local funds for planned Year 2 activities, but following Town Meeting acceptance, access to those funds were blocked. State funding was secured in March 2006 from the "State Revolving Fund Loan Program for Clean Water Projects" in the amount of \$150,000. Matching town funding was appropriated in May 2006 during Town Meeting. After funding was approved, the Town completed storm drainage outfall inspections and dry weather sampling, located drainage structures throughout Town and developed a drainage system map using GPS technology. The Town is in the process of securing funds for Storm Water Best Management Practices in 2009. These funds will be used to implement the flyer, brochure and public notices templates, update the drainage mapping, create a catch basin cleaning program, create a street sweeping program, and create a drainage pipe inspection program (see attached Project Budget sheet for work to be done by BETA Group, Inc.)

Updates to previously submitted information:

**Part I.B.2(e)** The Town's permit eligibility with regard to the Endangered Species Act was pending at the time of the NOI submission, and is still considered to be pending. The Town inspected all Town-owned drainage outfalls during Year 4 of the permit period, and sampled any outfalls that exhibited signs of dry weather flow or other indications of potential illicit discharge. This information will be used to help determine eligibility with respect to the Endangered Species Act. The Town is attempting to gather enough information to complete this eligibility requirement by the end of Year 7.

**Part I.B.2(k)** The Town had a goal of completing the dry-weather sampling in Years 2 and 3. A delay in the securing of State funding delayed this process. State funding was secured in March 2006 and matching town funding appropriated in May 2006 during Town Meeting. The Town is in the process of evaluating the source of any discharges that would cause or contribute to in-stream exceedance of water quality standards and will continue during Year 6 of the permit program.

The Town has completed the required self-assessment and has determined that the municipality is in compliance with all permit conditions, except for the following provisions:

### **Part II.B.1-6**

Any Provisions of Part II.B.1-6 that have not been met are detailed in Part III below. In particular, many of the public education and involvement BMPs were not implemented in Year 6 of the permit period and the illicit discharge and elimination BMPs will be attempted in Year 7.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 6</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 7</b>
1-1	Flyer, Brochure Distribution	DPW-Water Division	Insert handout with water bill. Display at Town Hall, DPW office, and local library.	Town in process of developing materials to distribute to residents.	Begin displaying handouts at Town Hall, DPW, and library. Include flyers with water bills beginning in Fall of 2009.
1-2	Public Notices	DPW, Board of Health	Display informational advertisements in local Moneysaver and Buzz publications.	Public notices not conducted in Year 6.	Develop press release and article for inclusion into locally circulated newspapers in Fall of 2009.
1-3	Classroom Education	School Department	Introduce storm water management to schools, targeting the 5 <sup>th</sup> grade.	There were no education programs conducted in Year 6.	DPW to meet with School Department during 2009-2010 school year towards possible inclusion into 2010-2011 school curriculum.
1-4	Television, Internet Media	DPW	Notices on cable TV, create storm water piece, create web site.	Public service announcement not created. Town web site still under development.	Create public service announcement to air on local cable access channel. Post information on Town web site, once established. Targeting Fall of 2009.

**1a. Additions**

--	--	--	--	--	--

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
2-1	Community Storm Water Hotline, Weblink	DPW, Board of Selectmen	Create hotline and weblink for residents to contact DPW	Town currently developing comprehensive web site.	Development of storm water hotline and weblink will follow the development of the Town web site.
2-2	Storm Drain Stenciling Program	DPW, Volunteers	Stencil drains near water supplies, use Boy Scout volunteers.	Town gathering storm drain stenciling materials.	Begin stenciling program, stencil approximately 100 catch basins in summer of Year 7.
2-3	School Poster Project Contest	DPW, School Department	Student educational projects, display projects.	DPW to meet with School Department during 2009-2010 school year.	Have student posters posted in Spring of 2010.
2-4	Volunteer Programs	DPW, School Department	Pond cleanup days, Adopt-a-Pond/Stream programs.	Volunteer programs not conducted in Year 6.	Develop “Keep Randolph Clean” volunteer event for Summer of 2010.
2-5	Recycling/Disposal Programs	Board of Health, DPW	Recycle, properly dispose of glass, plastic, metal, oil, paint, etc.	Town issues annual recycling guide to residents, including curbside schedule, “cheat sheet”, and phone numbers for additional information. Town also conducts annual hazardous waste collection day.	Continued guidance to residents and scheduling of annual hazardous waste collection days. Annual hazardous waste collection is in October of every year.

### 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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
3-1	Illicit Discharge Bylaw	Town Council, Conservation Commission, Board of Health	Create bylaw to prosecute illegal dumping activities.	Illicit discharge bylaw has not yet been created by the Town.	Coordination with Board of Selectmen and Town Council to begin process of creating discharge bylaw.
3-2	Illegal Dumping Education, Enforcement	DPW, Board of Health, Conservation Commission, Police Department	Issue notice to residents, prosecute illegal dumping. Post signs warning of consequences of illegal dumping.	DPW personnel monitor illegal dumping situation, issue warnings to those caught dumping illegally.	Town will begin creating flyers and signs for education, as described in SWMP. Will also be posting illegal dumping signs.
3-3	Inspection/Sampling Program	DPW	Inspect discharges, sample if warranted, monitor results.	Town has sampled 23 discharges, with at least 11 possible illicit connections.	Town will further investigate to determine source of contamination, and will remove illicit connections.
3-4	Drainage Mapping Update	DPW-Engineering Division	Update drainage maps, specifications, and outfall and structure condition.	Town has completed drainage map of outfalls and structures using GPS in Year 4.	Town will continue to update drainage map when new pipes and structures are installed, particularly in new developments.

#### 3a. Additions

--	--	--	--	--	--

**4. Construction Site Stormwater Runoff Control**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 6</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 7</b>
4-1	Lot Grading/ Construction Bylaw	DPW- Engineering Division	Enforce bylaw during construction activities.	Continued enforcement of Town bylaw through engineering controls.	Continued enforcement of Town bylaw through engineering controls.
4-2	Construction Site Inspections	DPW- Engineering Division	Conduct routine site inspections, sign on, sign off system.	Town maintains an ongoing inspection process, including a sign off system when development sites are in compliance with construction regulations.	Continued inspections to ensure compliance with Town regulations.

**4a. Additions**

--	--	--	--	--	--

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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 6</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 7</b>
5-1	Subdivision Management	Planning Board, DPW-Engineering Division, Conservation Commission	Obtain as-built drawings, compare to planning regulations.	Continuing to regulate the development of new subdivisions, requiring approval of subdivision plans, drawings, etc. Subdivisions are inspected both during and after development.	Continued monitoring of subdivision development activities.
5-2	BMP Inspection, Maintenance	DPW-Engineering Division	Routine inspections of BMP structures and designs.	Conservation Commission routinely monitors the various BMP structures and designs located within the Town.	Continued monitoring of BMP structures and designs, and enforcement actions where appropriate.
5-3	Private Development Drainage Bylaw	Town Council, Planning Board, Board of Selectmen, Conservation Commission	Bylaw to keep private developments in compliance.	Currently governing private development drainage through the use of Conservation Commission and Planning Board measures and controls.	Town in process of developing bylaw to govern post-construction drainage systems in private developments.

**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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
6-1	Catch Basin Cleaning Program	DPW-Highway Division	Routine cleaning of all catch basins, monitor structure condition.	More intensive cleaning schedule for all catch basins. In process of creating a priority cleaning schedule.	Continued cleaning efforts. Completion of priority cleaning schedule.
6-2	Street Sweeping	DPW-Highway Division	Routine street sweeping, proper disposal practices.	Currently sweep all streets and most Town-owned parking lots once per year. Busier streets swept twice per year or more, as deemed necessary.	Develop priority street sweeping schedule. Incorporate all Town-owned parking lots into sweeping program.
6-3	Drainage Pipe Inspection	DPW-Engineering and Highway Divisions	Inspect pipes, repair as needed, record condition.	Funds maintained for ongoing inspections for drainage pipes on an as-needed basis.	Create inspection and maintenance database for drainage pipe system. Record service dates, actions.
6-4	Drainage Pipe Cleaning	DPW-Highway Division	Clean, flush pipes as needed, record condition.	Cleaning of pipes continues to be conducted on an as-needed basis.	Incorporate drainage pipe cleaning activities into maintenance database, recording cleaning dates, condition, etc.
6-5	Structure Updates, Replacements	DPW-Highway Division	Repair, replace manholes and catch basins as needed.	Structure maintenance is performed on an as-needed basis.	Incorporate structure maintenance log into inspection and maintenance database.

### 6a. Additions

--	--	--	--	--	--

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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 6</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 7</b>
2-2	Storm Drain Stenciling Program	DPW, Volunteers	Stencil drains near water supplies, use Boy Scout volunteers.	Town gathering storm drain stenciling materials.	Begin stenciling program, stencil approximately 100 catch basins in summer of Year 7.
3-1	Illicit Discharge Bylaw	Town Council, Conservation Commission, Board of Health	Create bylaw to prosecute illegal dumping activities.	Illicit discharge bylaw has not yet been created by the Town.	Coordination with Board of Selectmen and Town Council to begin process of creating discharge bylaw.
3-2	Illegal Dumping Education, Enforcement	DPW, Board of Health, Conservation Commission, Police Department	Issue notice to residents, prosecute illegal dumping. Post signs warning of consequences of illegal dumping.	DPW personnel monitor illegal dumping situation, issue warnings to those caught dumping illegally.	Town will begin creating flyers and signs for education, as described in SWMP. Will also be posting illegal dumping signs.
3-3	Inspection/Sampling Program	DPW	Inspect discharges, sample if warranted, monitor results.	Town has sampled 23 discharges, with at least 11 possible illicit connections.	Town will further investigate to determine source of contamination, and will remove illicit connections.
6-2	Street Sweeping	DPW-Highway Division	Routine street sweeping, proper disposal practices.	Currently sweep all streets and most Town-owned parking lots once per year. Busier streets swept twice per year or more, as deemed necessary.	Develop priority street sweeping schedule. Incorporate all Town-owned parking lots into sweeping program.

**7a. Additions**

--	--	--	--	--	--

**7b. WLA Assessment**

The cleaning of all Town-owned catch basins provides a tremendous amount of benefit by removing waste and pollutants from storm water, prior to outfall into the Town's water and wetland resource areas. Sweeping all Town-owned streets also prevents sand, dirt, and debris from carrying pollutants into the drainage system. Also, pipe cleaning and inspection on an as-needed basis prevents a buildup of pollutant carrying sediments from entering into resource areas.

**Part IV. Summary of Information Collected and Analyzed**

In November 2006, the DPW completed a storm drain discharge inspection, inventory, and environmental sampling program. The dry weather sampling program involved inspecting and sampling each drainage discharge after three consecutive days of dry weather. Samples were taken and analyzed for the following parameters:

- Ammonia Nitrogen (>0.4 mg/l indicates sewage contamination)
- Surfactants (>.1mg/l indicates sewage contamination)
- Fecal Coliform Bacteria (>200 colonies/100 ml indicates sewage contamination)
- Enterococcus Group (>200 colonies/100 ml indicates sewage contamination)
- Total Dissolved Solids (TDS)
- Nitrate Nitrogen
- Fluoride
- Phosphorous
- Total Metals, including arsenic, barium, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, and zinc

A total of 23 outfalls were inspected and sampled for the above parameters. Approximately 3,000 ml of water taken was from each outfall using proper sampling techniques. The results indicate at least 11 possible illicit connections.

The town will continue to investigate the source of contamination of these areas. Further testing is planned for the Spring and Summer of 2010.

**Part V. Program Outputs & Accomplishments**

**Programmatic**

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	N/A

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	0
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
<b>Household Hazardous Waste Collection Days</b>		
• days sponsored	(#)	1
• community participation	(%)	N/A
• material collected	(tons or gal)	Unknown
School curricula implemented	(y/n)	No

## Legal/Regulatory

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

## Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	~450
System-Wide mapping complete	(%)	100%
<b>Mapping method(s)</b>		
• Paper/Mylar	(%)	2%
• CADD	(%)	0%
• GIS	(%)	98%
Outfalls inspected/screened	(# or %)	23
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	0
% of population on sewer	(%)	99.9%
% of population on septic systems	(%)	0.1%

## 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 %)	Ongoing
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	Few Minor

### Post-Development Stormwater Management

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

### Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1 time every 3 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1 time/year
Total number of structures cleaned	(#)	Unknown
Storm drain cleaned	(LF or mi.)	Unknown
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Not Measured
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Fill Material
Cost of screenings disposal	(\$)	N/A

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2 times/year
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2 times/year
Qty. of sand/debris collected by sweeping	(lbs. or tons)	Not Measured
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Fill Material
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	2 Owned
Vacuum street sweepers specified in contracts	(y/n)	No

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	Products	Ice Ban Magic and Sand
Pre-wetting techniques utilized	(y/n)	Yes
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Yes

Estimated net reduction in typical year salt application	(lbs. or %)	Unknown
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	No

