TOWN OF NORTH ANDOVER
DIVISION OF PUBLIC WORKS
384 OSGOOD STREET
NORTH ANDOVER, MASSACHUSETTS 01845-2909

J. WILLIAM HMURCIAK, DIRECTOR, P.E.

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Director of Engineering

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April 26, 2006

MAY - 2 2006

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, Massachusetts 02114-2023

Re: National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems Annual Report for Town of North Andover (Permit Year 3) Permit Number: MAR041214/MA DEP Transmittal Number: W034970

To Whom It May Concern:

Pursuant to the requirements of EPA's "National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems" issued May 1, 2003; the Town of North Andover is pleased to submit the enclosed Annual Report for Permit Year 3. If you have any questions regarding this report, please feel free to contact me.

Very truly yours,
NORTH ANDOVER DEPARTMENT OF PUBLIC WORKS

J. William Hmurciak, P.E.
Director

Enclosures

cc: Mr. James F. Finegan, P.E. - Project Manager, Weston & Sampson

Municipality/Organization: North Andover, MA

EPA NPDES Permit Number: MAR041214

MaDEP Transmittal Number: W034970

Annual Report Number & Reporting Period: No. 3: May 1, 2005 – April 30, 2006

NPDES PII Small MS4 General Permit Annual Report

MAY - 2 2006

Part I. General Information

Contact Person: **J. William Hmurciak, P.E.** Title: **DPW Director**

Telephone #: **(978) 685-0950** Email: Whmurciak@townofnorthandover.com

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: Mark H. Rees

Printed Name: Mark H. Rees

Title: Town Manager

Date: 4-29-06

Part II. Self-Assessment

The town of North Andover has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1a	Air stormwater messages on local cable channel	Division of Public Works	Air one new message for two weeks quarterly	The town set up a list of stormwater messages that they put together to air on the local cable access channel. These messages are targeted at homeowners and what they can do to prevent nonpoint source pollution. A new message airs each month.	The town will continue to air these message throughout the fourth permit year.
Revised					
1b	Add stormwater information to Town's website	Division of Public Works	Complete update by end of the second permit year	Links to information about stormwater included on the town website during Permit Year 1 were maintained throughout Permit Year 3. This information is directed at adults, educators, and kids, and also includes links to local watershed websites. Information about protecting lakes from nonpoint source pollution included during Permit Year 1 also remains on the town website. During Permit Year 3, the town also added the stormwater messages that were prepared for the local cable access channel to the town website.	The town will continue to add new stormwate information to the website. as needed throughout the fourth permit year.
Revised					
1c	Distribute/post non-point source pollution posters	Division of Public Works	Post in all schools and town-owned buildings	Posters were distributed to and posted in the Town Library, Office of Community Development, Town Hall, and the Water Treatment Plant during Permit Year 1. No goals relative to this item were planned for Permit Year 3.	No goals relative to this item are planned for Permit Years 4 and 5.
Revised					
1d	Inform residents of Town's recycling programs/schedules	Division of Public Works	Distribute info. to all residents by website, mailings, etc.	On the town's website, information remains available on the following: items that can be recycled, the recycling calendar, the recycling bylaw, the Neighborhood Recycling Incentive Program, reuse, and yard waste recycling.	The town will continue to make informatio regarding the recycling program available t residents via the town website. In the event tha changes are made to the recycling program, th town's website will be updated accordingly.
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
2a	Collect household hazardous waste from residents	Division of Public Works	Hold household haz. waste collection day twice per year	North Andover held Household Hazardous Waste Collection Days twice this year on October 15th, 2005 and April 15th, 2006 from 9am to 1pm at the DPW garage. The town held a general household hazardous waste collection day the third Saturday of every month from 9 am to noon.	North Andover will continue to hold an Annua Household Hazardous Waste Collection Da every fall and spring. The town will als continue to hold the general househol hazardous waste collection day on a monthl basis.
Revised					
2b	Collect & recycle waste oil	Division of Public Works	Collect waste oil from residents twice per month	The DPW collected waste oil the third Saturday of every month from 9 am to noon for recycling.	The DPW will continue to collect and recycl waste oil on a monthly basis.
Revised					
2c	Develop stormwater hotline	Division of Public Works	Create phone number(s) & inform residents of hotline	The town set up a stormwater hotline to track illegal dumping and added this information to the town website. The town wants residents to be able to call the hotline and obtain information, ask questions, provide feedback, and report illegal dumping.	The town plans to have the stormwater hotlin up and running throughout the fourth permi year.
Revised					
2d	Coordinate an annual, volun. waterways clean-up day	Division of Public Works/ ConCom	Hold waterways clean-up day once per year beginning in the Spring of 2005 (Permit Year 3)	North Andover held their 4th annual town-wide Earth Day Clean-up on April 29, 2006 from 8:30am to 3:30pm. Residents volunteered to pick up litter and were allowed to focus their efforts in a part of town of their choosing. The first two years this event was held, 500 residents took part picking up 75 cubic yards of trash and litter. With the help of local boy scouts, the town also held their 1st annual Waterways Clean-up Day on April 29, 2006 in conjunction with Earth Day. Cleanup focused on the area adjacent to Lake Cochichewick.	Throughout the fourth permit year, the tow will continue to garner support and ideas for th annual waterways clean-up day, and wil continue to hold a waterways cleanup day i conjunction with the annual Earth Day Clean up each year.
Revised					
2e	Make SWMP available for public review/comment	Division of Public Works	Post SWMP on Town website, in library, in DPW office	Copies of the SWMP created for the town were placed in the Town Library, at the DPW office, and the SWMP was posted on the town website during Permit Year 1. The SWMP remained available at these locations during Permit Year 3.	Throughout the fourth permit year, the tow will continue to make the SWMP available a the Town Library, at the DPW office, and o the town website.
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3a	Map outfalls, receiving waters, and storm drain system	Division of Public Works	Complete mapping by end of fourth permit year	During Permit Year 3, drainage structures located in an additional subdrainage basin were collected using GPS. This information was added to the GIS drainage mapping being created for the town. To date, outfall locations have been collected for three subdrainage basins.	The town will continue with the outfal mapping during the fourth permit yea attempting to map drainage structures on subdrainage basin at a time. The town plans t complete all outfall mapping by the end of th fifth permit year.
Revised					
3b	Develop illicit discharge detection & elimination plan	Division of Public Works	Make recommendations for proposed plan	None to date.	None. The development of the illicit discharg detection and elimination plan will begin in th fourth permit year.
Revised					
3c	Review existing bylaws and regulations	Division of Public Works	Determine whether existing bylaws/regs are adequate	The town finished reviewing their existing regulations with regard to illicit discharge detection and elimination, and is in the process of incorporating relevant information into a new bylaw that they are working on developing.	No goals relative to this item are planned fo Permit Years 4 and 5.
Revised					
3d	Develop/modify general illicit discharge bylaw	Division of Public Works	If necessary, propose recommen. for bylaw updates	The town is in the process of reviewing model bylaws and developing a general illicit discharge bylaw that meets USEPA requirements.	None. During the fourth permit year, the tow will finish the development of a general illici discharge bylaw that meets USEP/ requirements.
Revised					
3e	Present bylaw for Town meeting action	Division of Public Works	Make presentations for Town meeting action, if necessary	None to date.	None. During the fourth permit year, th general illicit discharge bylaw will be presente for Town Meeting action.
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
4a	Review existing bylaws and regulations	DPW/Planning/ConCom	Determine whether existing bylaws/regs are adequate	The town finished reviewing the relevant sections of their Rules and Regulations governing the Subdivision of Land and the Zoning Bylaws and is in the process of incorporating relevant information into a new bylaw governing the control of construction site stormwater runoff.	No goals relative to this item are planned for Permit Years 4 and 5.
Revised					
4b	Develop/modify bylaws for construction site runoff	DPW/Planning/ConCom	If necessary, propose recommen. for bylaw updates	The town is in the process of reviewing model bylaws and developing a bylaw governing the control of construction site stormwater runoff.	In the fourth year of the permit, the town will finalize the development of a bylaw for the control of construction site runoff.
Revised					
4c	Present bylaw for Town meeting action	DPW/Planning/ConCom	Make presentations for Town meeting action, if necessary	None to date.	None. Applicable bylaws will be presented for Town Meeting action during the fourth year of the permit.
Revised					
4d	Review existing site inspection practices	DPW/Planning/ConCom	Determine whether existing practices are adequate	None to date.	None. The town will review the erosion/sedimentation control and drainage submittal requirements, as well as the site inspection practices during the fourth permit year.
Revised					
4e	Develop/modify site inspection practices	DPW/Planning/ConCom	If necessary, make recommen. for updating existing practices	None to date.	None. During the fifth permit year, the town will make recommendations for improving site inspection practices.
Revised					

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
5a	Review existing bylaws and regulations	DPW/Planning/ConCom	Determine whether existing bylaws/regs are adequate	The town finished reviewing the relevant sections of their Rules and Regulations governing the Subdivision of Land and the Zoning Bylaws and is in the process of incorporating relevant information into a new bylaw governing post-construction stormwater management in new development and redevelopments.	No goals relative to this item are planned for Permit Years 4 and 5.
Revised					
5b	Develop/modify bylaws for post-construction runoff	DPW/Planning/ConCom	If necessary, propose recommen. for bylaw updates	The town is in the process of reviewing model bylaws and developing a post-construction site runoff control bylaw that meets USEPA requirements and considers MA DEP Stormwater Management Policy Standard 3 (Recharge to Groundwater).	In the fourth year of the permit, the town will finish development of a post-construction site runoff control bylaw and prepare to present it for Town Meeting action.
Revised					
5c	Present bylaw for Town meeting action	DPW/Planning/ConCom	Make presentations for Town meeting action, if necessary	None to date.	None. The post-construction site runoff control bylaw will be presented for Town Meeting action during the fourth year of the permit.
Revised					
5d	Review existing site inspection practices	DPW/Planning/ConCom	Determine whether existing practices are adequate	The town is in the process of reviewing their existing site inspection and maintenance practices to determine whether they comply with USEPA's stormwater management plan requirements.	During the fourth year of the permit, the town will complete review of their existing site inspection and maintenance practices to ensure their compliance with USEPA's stormwater management plan requirements.
Revised					
5e	Develop/modify site inspection practices	DPW/Planning/ConCom	If necessary, make recommen. for updating existing practices	None to date.	None. In the fifth permit year, the town's existing site inspection and maintenance practices will be modified as needed to ensure compliance with USEPA requirements.
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6a	Sweep streets	Division of Public Works	Sweep all Town streets once per year; Stevens Pond 2/yr.	During Permit Year 3, 150 lane miles of roadway were swept of winter sand.	During Permit Year 4, the town intends to sweep all streets at least once per year, again placing particular emphasis on the streets surrounding Stevens Pond.
Revised					
6b	Clean catch basins	Division of Public Works	Develop & implement cleaning schedule; Stevens Pond 1/yr.	During Permit Year 3, a total of 320 catch basins were cleaned by machine or by hand.	During Permit Year 4, the town hopes to increase the number of catch basins that are cleaned on an annual basis.
Revised					
6c	Train municipal employees at each facility	Division of Public Works	Target all applicable municipal facilities	During the third permit year, the town sent questionnaires to municipal facilities to gather information regarding their existing stormwater practices, and selected videos to use in training municipal employees in good housekeeping practices.	During the fourth permit year, the town will use the information collected from the questionnaire to develop a training program. The town will train employees at all applicable municipal facilities during the fourth and fifth permit years.
Revised					
6d	Perform follow-ups to ensure required practices are met	Division of Public Works	Target all applicable municipal facilities	None to date.	None. In the fifth year of the permit, annual follow-ups will be performed at municipal facilities to ensure that employees working at these facilities are following the required stormwater management practices, and that new employees are receiving the required training.
Revised					
Revised					

6a. Additions

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

This Section is not applicable.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No (Director of Engineering oversees stormwater management)
Annual program budget/expenditures	($)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	Earth Day and a Stream Clean-up Day are held annually
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	First two years – 500 residents participated and 75 yd^3 of trash was collected
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	2 (annually)
▪ community participation	(%)	
▪ material collected	(tons or gal)	

School curricula implemented	(y/n)	

Legal/Regulatory

	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		
▪ Post-Development Stormwater Management		X		
Accompanying Regulation Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X		
▪ Post-Development Stormwater Management		X		

Mapping and Illicit Discharges

Outfall mapping complete	(%)	40%
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	50%
Mapping method(s)		
▪ Paper/Mylar	(%)	50%
▪ CADD	(%)	
▪ GIS	(%)	50%
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	

Site inspections completed	(# or %)	
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and $)	
Complaints/concerns received from public	(#)	

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	~1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	320
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		recycle
Cost of screenings disposal	($)	

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

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

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	33% 2%
Pre-wetting techniques utilized	(y/n)	Y
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 %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	