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

J. William Hmurciak
Director

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05

April 29, 2005

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 2)
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 2. If you have any questions regarding this report, please feel free to contact me.

Very truly yours,

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. 2: May 1, 2004 – April 30, 2005**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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

Telephone #: **(978) 685-0950** Email:

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: 4-28-05

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1a Revised	Air stormwater messages on local cable channel	Division of Public Works	Air one new message for two weeks quarterly	The town has finished devising a list of stormwater messages to air on the local cable access channel. These messages are targeted at homeowners and what they can do to prevent nonpoint source pollution. The town is in the process of getting these messages aired on the local cable access channel.	The town will continue to air these messages throughout the third permit year.
1b Revised	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 2. 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. The town is in the process of adding additional information including the stormwater messages that were prepared for the local cable access channel.	The town will continue to add new stormwater information to the website throughout the third permit year.
1c Revised	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 2.	No goals relative to this item are planned for Permit Years 3, 4, and 5.
1d Revised	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 has been included regarding the following: items that can be recycled, the recycling calendar, the recycling bylaw, the Neighborhood Recycling Incentive Program, reuse, and yard waste recycling. This year a recycling student essay and poster contest was held in town.	The town will continue to make information regarding the recycling program available to residents via the town website. In the event that changes are made to the recycling program, the town's website will be updated accordingly.

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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 16th, 2004 and April 16th, 2005 from 9am to 1pm at the DPW garage. The town also 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 Annual Household Hazardous Waste Collection Day at a minimum every spring. The town will also continue to hold the general household hazardous waste collection day on a monthly 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 recycle 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 is in the process of getting the stormwater hotline up and running. 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 hotline up and running by the end of the third permit 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 3rd annual town-wide Earth Day Clean-up on April 23, 2005 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. The town is in the process of coordinating a similar event that would focus on town waterways.	Throughout the third permit year, the town will continue to garner support and ideas for the annual waterways clean-up day, and then hold their first clean-up day during Permit Year 3. The town would like to try to coordinate this work with the Earth Day Clean-up held each year in April.
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 2.	Throughout the third permit year, the town will continue to make the SWMP available at the Town Library, at the DPW office, and on 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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3a	Map outfalls, receiving waters, and storm drain system	Division of Public Works	Complete mapping by end of fourth permit year	During Permit Year 2, 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.	The town will continue with the outfall mapping during the third permit year, attempting to map drainage structures one subdrainage basin at a time. The town plans to complete all outfall mapping by the end of the 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 discharge detection and elimination plan will begin in the fourth permit year.
Revised					
3c	Review existing bylaws and regulations	Division of Public Works	Determine whether existing bylaws/regs are adequate	None to date.	None. During the third permit year, the town will review the existing bylaws and regulations for requirements relating to illicit discharge detection and elimination.
Revised					
3d	Develop/modify general illicit discharge bylaw	Division of Public Works	If necessary, propose recommen. for bylaw updates	None to date.	None. A general illicit discharge bylaw that meets USEPA requirements will be developed during the third permit year.
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, the general illicit discharge bylaw will be presented 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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
4a	Review existing bylaws and regulations	DPW/Planning/ConCom	Determine whether existing bylaws/regs are adequate	None to date.	None. In the third permit year, the town will review the relevant sections of the Rules and Regulations governing the Subdivision of Land and the Zoning Bylaws.
Revised					
4b	Develop/modify bylaws for construction site runoff	DPW/Planning/ConCom	If necessary, propose recommen. for bylaw updates	None to date.	None. In the third permit year, the town will propose comments detailing recommended revisions to the existing controls as they relate to construction site stormwater runoff. Applicable bylaws will then be modified as necessary during the fourth year of the permit.
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
5a	Review existing bylaws and regulations	DPW/Planning/ConCom	Determine whether existing bylaws/regs are adequate	None to date.	None. In the third permit year, the town will evaluate regulations regarding the control of post-construction stormwater runoff, including the Rules and Regulations Governing the Subdivision of Land and the Zoning Bylaws.
Revised					
5b	Develop/modify bylaws for post-construction runoff	DPW/Planning/ConCom	If necessary, propose recommen. for bylaw updates	None to date.	None. Beginning in the third year of the permit, the town will develop a post-construction site runoff control bylaw that meets USEPA requirements and will consider MA DEP Stormwater Management Policy Standard 3 (Recharge to Groundwater).
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	None to date.	None. During the third year of the permit, the town will review existing site inspection and maintenance practices. The town will subsequently determine whether the existing site inspection and maintenance practices comply 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 accordingly 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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6a	Sweep streets	Division of Public Works	Sweep all Town streets once per year; Stevens Pond 2/yr.	During Permit Year 2, 285 lane miles of roadway were swept of winter sand. All streets were swept at least once. The lane miles of roadway swept this year increased from the 280 miles of roadway swept last year due to the construction of new roadways.	During Permit Year 3, the town intends to sweep all streets at least once per year, 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 2, a total of 350 catch basins were cleaned by machine or by hand. The number of catch basins cleaned this year increased from the 270 catch basins cleaned last year.	During Permit Year 3, the town intends to continually 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 second permit year, the town started to gather information regarding existing stormwater practices at municipal facilities. As part of this effort, the town is in the process of putting a questionnaire together to help them more easily obtain information from various facilities.	During the third 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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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 only at present
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Last 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	(%)	25%
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	(#)	350
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.)		
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)	
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 %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	