Municipality/Organization: North Andover, MA

EPA NPDES Permit Number: MAR041214

MaDEP Transmittal Number: W034970

Annual Report Number & Reporting Period: No. 4: May 1, 2006 – April 30, 2007

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: **Eugene P Willis, P.E.** Title: **DPW Director of Engineering**

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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: 5/1/07

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1a Revised	Air stormwater messages on local cable channel	Division of Public Works	Air one new message for two weeks quarterly	The town previously 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 aired each month throughout the fourth permit year.	The town will continue to air these message throughout the fifth 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 4. 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 stormwater messages that were prepared for the local cable access channel and were added to the to the town website in Year 3 were maintained throughout Year 4.	The town will continue to add new stormwate information to the website, as needed throughout the fifth 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 related to this item were planned for Permit Year 4.	No goals related to this item are planned for Permit Year 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 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.

1a. Additions

2. Public Involvement and Participation

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BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2a Revised	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 21st, 2006 and April 21st, 2007 from 9am to 1pm at the DPW garage. The town holds 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 also continu to hold the general household hazardous wast collection day on a monthly basis.
2b Revised	Collect & recycle waste oil	Division of Public Works	Collect waste oil from residents twice per month	The DPW collected waste oil for recycling the first and third Saturdays of every month from 9 am to noon.	The DPW will continue to collect and recycl waste oil on a monthly basis.
2c Revised	Develop stormwater hotline	Division of Public Works	Create phone number(s) & inform residents of hotline	The town continued to have in place a stormwater hotline to track illegal dumping, with information included on 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 continue to have the stormwate hotline in place throughout the fifth permit year.
2d Revised	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 5th annual town-wide Earth Day Clean-up on April 28, 2007 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. Last year, 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. The town has their second waterways clean-up day planned, but not yet completed.	Throughout the fifth permit year, the town wil continue to garner support and ideas for th annual Earth Day Clean-up. The town also hope to resume their annual waterways clean-up day which is held in conjunction with the annual Eart Day Clean-up each year.
2e Revised	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 4.	Throughout the fifth permit year, the town wil continue to make the SWMP available at th Town Library, at the DPW office, and on the tow website.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3a	Map outfalls, receiving waters, and storm drain system	Division of Public Works	Complete mapping by end of fourth permit year	During Permit Year 4, drainage structures (outfalls, manholes, and catch basins) 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 outfal mapping during the fifth permit year. The tow hopes to complete all outfall mapping withi urbanized areas by the end of the fifth permi year.
Revised					
3b	Develop illicit discharge detection & elimination plan	Division of Public Works	Make recommendations for proposed plan	During Permit Year 4, the town completed the development of an illicit discharge detection and elimination plan.	No goals related to this item are planned fo Permit Year 5.
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 in the third permit year. No goals related to this item were planned for Permit Year 4.	No goals related to this item are planned fo Permit Year 5.
Revised					
3d	Develop/modify general illicit discharge bylaw	Division of Public Works	If necessary, propose recommen. for bylaw updates	The town developed a general illicit discharge bylaw that meets USEPA requirements during the fourth permit year.	No goals related to this item are planned fo Permit Year 5.
Revised					
3e	Present bylaw for Town meeting action	Division of Public Works	Make presentations for Town meeting action, if necessary	During the fourth permit year, the general illicit discharge bylaw was presented for printing in Town Meeting warrant. However, the bylaw did not meet legal requirements and was withdrawn.	During the fifth permit year, the general illici discharge bylaw will be modified and presente again 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
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 related to this item were planned for Permit Year 4.	No goals related to this item are planned for Permit Year 5.
Revised					
4b	Develop/modify bylaws for construction site runoff	DPW/Planning/ConCom	If necessary, propose recommen. for bylaw updates	In the fourth year of the permit, the town completed the development of a bylaw for the control of construction site runoff.	No goals related to this item are planned for Permit Year 5.
Revised					
4c	Present bylaw for Town meeting action	DPW/Planning/ConCom	Make presentations for Town meeting action, if necessary	During the fourth permit year, the bylaw governing construction site runoff was presented for printing in Town Meeting warrant. However, the bylaw did not meet legal requirements and was withdrawn.	During the fifth permit year, the bylaw governing construction site runoff will be modified and presented again for Town Meeting action.
Revised					
4d	Review existing site inspection practices	DPW/Planning/ConCom	Determine whether existing practices are adequate	During the fourth permit year, the town completed review of their erosion/sedimentation control and drainage submittal requirements, as well as their site inspection practices.	No goals related to this item are planned for Permit Year 5.
Revised					
4e	Develop/modify site inspection practices	DPW/Planning/ConCom	If necessary, make recommen. for updating existing practices	None to date.	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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
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 during the third permit year. No goals related to this item were planned for Permit Year 4.	No goals related to this item are planned for Permit Year 5.
Revised					
5b	Develop/modify bylaws for post-construction runoff	DPW/Planning/ConCom	If necessary, propose recommen. for bylaw updates	During the fourth permit year, the town developed a post-construction site runoff control bylaw that meets USEPA requirements and considers MA DEP Stormwater Management Policy Standard 3 (Recharge to Groundwater).	No goals related to this item are planned for Permit Year 5.
Revised					
5c	Present bylaw for Town meeting action	DPW/Planning/ConCom	Make presentations for Town meeting action, if necessary	During the fourth permit year, the post-construction site runoff control bylaw was presented for printing in Town Meeting warrant. However, the bylaw did not meet legal requirements and was withdrawn.	During the fifth permit year, the bylaw governing post-construction site runoff control will be modified and presented again for Town Meeting action.
Revised					
5d	Review existing site inspection practices	DPW/Planning/ConCom	Determine whether existing practices are adequate	During the fourth permit year, the town completed review of their existing site inspection and maintenance practices to determine whether they comply with USEPA's stormwater management plan requirements.	No goals related to this item are planned for Permit Year 5.
Revised					
5e	Develop/modify site inspection practices	DPW/Planning/ConCom	If necessary, make recommen. for updating existing practices	None to date.	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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6a	Sweep streets	Division of Public Works	Sweep all Town streets once per year; Stevens Pond 2/yr.	During Permit Year 4, 290 lane miles of roadway were swept of winter sand.	During Permit Year 5, 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 4, a total of 350 catch basins were cleaned by machine or by hand.	During Permit Year 5, the town hopes to continue 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 fourth permit year, the town used information obtained from questionnaires sent to municipal facilities to gather information regarding their existing stormwater practices to develop a municipal employee-training program. The town started to train employees at all applicable municipal facilities during the fourth permit year.	The town will complete training of employees at all applicable municipal facilities during the fifth permit year.
Revised					
6d	Perform follow-ups to ensure required practices are met	Division of Public Works	Target all applicable municipal facilities	None to date.	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	(%)	80%
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	65%
Mapping method(s)		
▪ Paper/Mylar	(%)	50%
▪ CADD	(%)	
▪ GIS	(%)	65%
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.)		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)	Sharpeners 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)	