Municipality/Organization: **Town of Reading**

EPA NPDES Permit Number: **MAR041056**

MaDEP Transmittal Number: **W-040966**

Annual Report Number
& Reporting Period: **No. 4: April 1, 2006 – March 31, 2007**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: George J. Zambouras Title: Town Engineer

Telephone #: (781) 942-9083 Email: gzambouras@ci.reading.ma.us

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: Peter I. Hechenbleikner

Title: Town Manager

Date: May 2, 2007

Part II. Self-Assessment

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

Failed to submit annual report on or before May 1. Submitted June 13th.

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
1	Research available public educational materials	Community Services/Public Works	Compilation of educational materials	Continued to collect public education materials for future use	No planned activities
2	Develop a Public Education Plan	Community Services/Public Works	Development of plan	Public Education Plan developed and included in the Town's Storm Water Handbook	BMP complete. No planned activities
3	Present Annual Report to Town Meeting	Public Works	Make presentation	Full report not provided at Spring Town Meeting	Full report to be reported to Town Meeting in Fall 2007
4	Implement Public Education Plan	Community Services/Public Works	Meet schedules identified in the plan	Continue Public Education Activities identified in the Public Education Plan. - Updated Community News Letter, Mailings with water billings and Town web site information.	Continue Public Education Activities identified in the Public Education Plan. Expanded content in new web site.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5	Establish a Stormwater Management Advisory Committee	General Services/Board of Selectmen	Establish Committee	BMP completed in year 1. No planned activities for year 4	No planned activities
6	Comply with Public Meeting Laws for Committee meetings	Public Works	Keep records of postings/advertising	The Water, Sewer and Storm Water Management Advisory Committee met monthly and all meetings were duly posted and/or advertised in accordance with State Law	Continue meetings, develop and review new regulations as necessary.
7	Develop a Public Involvement/Participation Plan	Community Services/Public Works	Development of plan	Completed development of the public participation plan.	Continue with public outreach.
8	Solicit volunteers for public participation plan	Community Services/Public Works	Keep records of organizations contacted	No volunteers identified.	Expand contact of local organizations to identify potential candidates for public involvement.
9	If sufficient volunteers are identified, implement plan	Community Services/Public Works	Keep records of public involvement/participation activities	No additional volunteers were identified	If sufficient volunteers are identified continue implementation of the public involvement participation plan.
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
10	Develop outfall map using existing information	Public Works	Map developed	Outfall map completed. Purchased GIS software to improve maping of outfalls.	BMP complete. Update map and convert to GIS format
11	Review exiting by-laws to determine if a new by-law is necessary	Community Services/Public Works	Report on adequacy of existing by-laws	Review completed	BMP complete. No planned activities
12	If necessary, develop non-storm water by-law	Community Services/Public Works	Write by-law and bring to Town Meeting	Board of Health Regulation being reviewed by Town Counsel and Town staff.	Adopt revised BOH sewer use regulation upon completion of review.
13	Develop three year plan to identify and eliminate illicit discharges	Public Works	Plan developed	Plan approximately 80% complete. - Adopted and received Town Meeting approval of Stormwater Enterprise fund fees - Secured additional funding for illicit detection program assistance.	Complete plan for illicit discharge detection and elimination.
14	Implement 3-year illicit discharge detection program	Public Works	Complete each phase of the program by dates outlined in plan	Drafted RFP for consultant assistance in illicit detection - Removal of illicit discharges within site redevelopment projects	Award illicit detection contract. Implementation and completion of the illicit discharge detection program. GIS mapping of illicit discharges.
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
15	Review existing by-laws and regulations	Community Services/Public Works	Summary report of regulatory review prepared	Review completed	BMP complete. No planned activities
16	If necessary, develop new erosion control by-law	Community Services/Public Works	New by-law brought to Town Meeting	The Town has incorporated the DEP Stormwater Management Policy into its Subdivision Rules and Regulations, Site Plan Rules and Conservation Commission Rules and Regulations. Therefore, this BMP is not necessary.	BMP complete. No planned activities
17	If necessary, amend existing erosion control regulations	Community Services/Public Works	Regulations amended	No zoning by-law amendments were presented for approval at Town Meeting. Subdivision Regulations were amended to expand application of Stormwater Management control.	BMP complete. Zoning and Town regulations to be amended if/when revisions are determined to be necessary to insure enforcement of erosion control regulations.
18	Revise/resubmit by-law if not approved by Town Meeting	Community Services/Public Works	By-law revised and resubmitted to Town Meeting	No planned activities	No planned activities
19	Enforce new by-laws or regulations	Community Services	Keep records of enforcement	Stormwater management and record keeping has been required all conservation, site plan, special permit and applicable site plan wavier application submittals to ensure enforcement of erosion control program - Inspect and monitor private construction activities for compliance with SWMP	Continue enforcement of erosion control program and regulations. Establish database of all privately owned regulated stormwater management devices.
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
20	Review existing by-laws and regulations	Community Services/Public Works	Summary report of regulatory review prepared	Review completed	BMP complete. No planned activities
21	If necessary, develop post-construction runoff by-law	Community Services/Public Works	New by-law brought to Town meeting	The Town has incorporated the DEP Stormwater Management Policy into its Subdivision Rules and Regulations, Site Plan Rules and Conservation Commission Rules and Regulations. Therefore, this BMP is not necessary.	BMP complete. No planned activities
22	Inventory existing BMPs that are under Town jurisdiction	Public Works	All BMPs inventoried	Inventory of BMP's previously completed via ACAD mapping.	BMP Inventory to be field verified and updated as necessary. Inventory to be incorporated into GIS mapping and database.
23	Develop five-year O&M plan for Town-owned BMPs	Community Services/Public Works	O&M Plan written	O&M plan developed for identified BMP's.	Update five-year O&M plan based on field verification of inventory.
24	Begin implementation of five-year O&M Plan	Public Works	Records of O&M activities maintained in accordance with O&M schedule	Began implementation of O&M plan with added personal and equipment funded through new Stormwater enterprise fund and fees. Started waterway restoration and cleanup & replaced misc. culverts. Secured funding for waterway cleanup.	Purchase of additional needed Maintenance equipment and secure funding of additional waterway cleanup - subject to Town Meeting approval.
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
25	Evaluate Town's current good housekeeping practices	Public Works	Report prepared on good housekeeping practices	Evaluation completed	BMP completed. Continue to monitor Town's practices
26	Develop written O&M plan to formalize Town's practices	Public Works	O&M Plan developed	O&M plan reviewed	Finalize O&M plan. Update final O&M plan as need determined by GIS mapping.
27	Implement O&M Plan	Public Works	Records of O&M activities maintained	Began implementation of draft O&M plan. Consolidate record of activities.	Continue activities of O&M plan
28	Sweep all Town owned streets and parking lots once per year	Public Works	All streets and parking lots swept, records maintained	All Town owned parking lots and streets were swept in the forth year of the permit and records were kept	Continue street sweeping once per year
29	Clean all Town owned catch basins once per year	Public Works	All catch basins cleaned, records maintained	All accessible Town owned catch basins were cleaned and records were kept. List of inaccessible catch basins developed.	Continue catch basin cleaning once per year. Verify list catch basins and stormwater devices through GIS mapping.
30	Provide one household hazardous waste drop off per year	Community Services/Public Works	Household hazardous waste drop-off conducted	Household hazardous waste drop-offs were conducted on May 20, 2006 and October 28, 2006	Two household hazardous waste drop-offs are planned - May 19, 2007 and October 2007
31	Provide used oil drop-off at the Public Works Garage at least 10 hours per week	Public Works	Used oil drop-off maintained, records of used oil maintained	Used oil drop-off at the Public Works garage was held Monday-Friday 7:30 AM-2:30 PM and Saturdays 9:00 AM-12:00 PM	Used oil drop-off expected to continue during the same hours as last year
32	Recycle Town generated tires, batteries, scrap metal, used oil	Public Works	Identified materials recycled, records kept	The Town recycled all its used tires, vehicle batteries, scrap metal and used oil in accordance with various contracts with recyclers	The Town intends to continue its recycling programs
Revised					

6a. Additions

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

No TMDLs have been established for any of the receiving waters.

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures**	($)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days **		
▪ days sponsored	(#)	2
▪ 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				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	230
System-Wide mapping complete	(%)	10%
Mapping method(s)		
▪ Paper/Mylar	(%)	65%
▪ CADD	(%)	35%
▪ GIS	(%)	0%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	2
Illicit connections removed	(#) (est. gpd)	2
% of population on sewer	(%)	97%
% of population on septic systems	(%)	3%

Construction

Number of construction starts (>1-acre)	(#)	7
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and $)	0
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 time/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1 time/yr
Total number of structures cleaned **	(#)	2791
Storm drain cleaned **	(LF or mi.)	1300 LF
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**	($)	
Drainage ditch/swale cleaned**		500 LF

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1 time/yr

Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2 times/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)	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	32% $CaCl_2$
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	N
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)	