City of Peabody, Massachusetts
Office of the Mayor
Michael J. Bonfanti
Mayor

24 Lowell Street
Peabody, MA 01960

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April 14, 2008

Ms. Ann Herrick
Attention: CIP
U.S. Environmental Protection Agency – Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Subject: National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Separate Stormwater Sewer System (MS4) General Permit Annual Report (Due: May 1, 2008)

Dear Ms. Ann Herrick,

Enclosed please find a copy of the City of Peabody Massachusetts NPDES Phase II Small MS4 annual report in accordance with the provisions of the Clean Water Act, as amended, (33 U.S.C. § 1251 et. Seq.{the Act}).

Please contact Richard Carnevale the Public Services Director at (978) 536-7126 if you have any questions.

Sincerely,

Michael J. Bonfanti
MICHAEL J. BONFANTI
MAYOR

Cc: Richard Carnevale, PE, LSP

P 4/15/08

Municipality/Organization: **CITY OF PEABODY**

EPA NPDES Permit Number: **MAR 041216**

MaDEP Transmittal Number: **W-035400**

Annual Report Number & Reporting Period: **April 1, 2007 – March 31, 2008**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2008)

Part I. General Information

Contact Person: RICHARD CARNEVALE
Title: DIRECTOR, PUBLIC SERVICES

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Email: richard.carnevale@peabody-ma.gov
Mailing Address: 50 Farm Avenue, Peabody, MA 01960

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: Michael J. Bonfanti

Printed Name: MICHAEL J. BONFANTI

Title: MAYOR OF PEABODY

Date:

Part II. Self-Assessment

The City of Peabody has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. It is anticipated that additional progress will be made as municipal budgets improve in FY08 and beyond.

Peabody has an extensive household hazardous waste program. Besides a once a year drop off, we collect waste oil, car batteries, propane tanks, computer monitors, refrigerators, televisions, computer units, air conditioners, and yard waste at all times throughout the year. From this program, we properly manage a number of toxic substances and enhance protection of stormwater quality. We also collect leaves curbside 12 weeks/year and provide drop off yard waste at all times throughout the year.

We sweep streets in the spring to remove sediment, thus improving runoff water quality. The City annually cleans about 2500 catch basins (of our 4500 total) to ensure water quality is met.

We also have minimized or eliminated the generation of hazardous waste at our DPW facilities to eliminate environmental impacts. Our vehicles are stored inside and are highly maintained, reducing leaks of fuel, hydraulic fluids, and other maintenance related toxic materials.

GIS Mapping upgrades are taking place for 100% mapping of Peabody's 8,000 drain structures. The work is part of our city wide structural and non structural BMP's GIS Program Upgrade. The completion of this mapping will improve the maintenance of the stormwater system. Peabody is 90% complete with this task.

The Friends of Peabody's Lakes are locally meeting monthly in order to focus on all Peabody water bodies in educating the public and improving water quality/recreational opportunities for Peabody's water ways. This group also conducts local sampling and shoreline clean ups.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – For New Permit Year 1
1A	Develop educ. resources	CD	SW Education Brochure	Mailed out in the fall of 2007 Greenscapes Guide-addresses stormwater education, pesticide application and composting.	Mail out in Fall 2008.
Revised					
1B	Develop educ. resources	CD	SW Educational Website	In progress, similar format as brochure.	Completion date estimated by July 2008.
Revised					
1C	Implem. educ. resources	CD	Inform people how to get involved w/local restoration	Cleaning of the North River, Proctor Brook, and Goldthwaite Brook, as well as Crystal Lake and 5 ponds, during the fall of 2007.	Continue cleanups for North River and other brooks as needed.
Revised					
1D	Implem. educ. resources	CD	Educate children of SW pollution and prevention	City water department educated high school students on how to sample surface water and taught pollution prevention techniques.	Have High School students sample Peabody's bodies of water.
Revised					
1E	Implem. educ. resources	CD	Cont. educ. of public using Local TV advertising & press	River cleanups were featured on Public Access and in the newspapers during the summer 2007.	Continue with updating and post new cleanups when they become available.
Revised					
1F	Implem. educ. resources	DPS	Cont. sign posting & animal waste cleanup enforcement	Signs are annually checked and replaced as needed.	Continue action.
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit Year 1
2A	Implem. educ. resources	CD	Inform people how to get involved w/local restoration	North River, Goldthwaite, Proctor brooks and Crystal Lake cleanup in summer and fall 2007.	Continue cleanups for North River and other water bodies.
Revised					
2B	SW Drain Stenciling	DPS	Investigate program thru volunteer assistance	No plans for stenciling.	No plans for stenciling.
Revised					
2C	Restoration and Cleanup	CD	Cont. w/Boy Scouts/Eagle Scouts river, stream/brook and pond cleanup/restoration	North River, Goldthwaite, and Proctor brooks and several 5 ponds ere cleaned up in 2007.	Continue cleanups for North River and other water bodies.
Revised					
2D	Public Involvement	CD	Increase public awareness and recreational use of Crystal Lake	Friends of Peabody Lakes meet monthly and are developing a plan for the clean up of Crystal Lake.	Continue with this action.
Revised					
2E	Public Involvement	Salem Coastwatch	North River Seminars and Meetings	Continued meeting with Salem Coast watch to discuss watershed protection along with flooding issues.	Continue public dialogue and education.
Revised					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit Year 1
3A	GIS Mapping Program	DPS	Cont. to impr. & update storm sewer & drain syst. mapping	Digitizing all stormwater drains, 90% complete.	Digitize all paper maps and plans. Place on website so all city employees will have access.
Revised					
3B	Ident. of Illegal discharges	DPS	Cont. eliminating discharges thru map. & monitoring	All identified illegal discharges repaired.	Continued elimination of discharges as discovered.
Revised					
3C	State Assessments	CD	Cont. assist w/water assessments	Implementing recommendations of watershed protection plans.	Collecting stormwater data and working with city for new SW regulations.
Revised					
Revised					
Revised					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit Year 1
4A	SW Ordinance	DPS	Dev. & Adopt for Const. & Post-Const. regulation	Working on new Const. & Post-Const. regulations.	Have new draft ordinance passed by city council.
Revised					
4B	SW Ordinance	CD	Est. regulations & guidelines to require controls and BMPs	Guidelines and BMPs are being updated.	Work and educate city council for adopting new guidelines and additional BMPs.
Revised					
4C	SW Ordinance	Planning Board	Conduct site plan review for BMPs	BMP review on going.	Educate employees and include in city project reviews.
Revised					
4D	SW Ordinance	DPS	Enforce violations and educated public	Educated customers to minimize enforcement actions.	Develop new training and workshops for local engineers, builder's construction managers and contractors.
Revised					
4E	Review Ordinances	CD	Subdiv. Regs. to encourage better site design practices	Researching new site designs and pollution prevention alternatives.	Reviewing with consultants and contractors on the feasibility of new practices.
Revised					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit Year 1
5A	SW Ordinance	City Council	Dev. & Adopt for Const. & Post-Const. regulation	Reevaluating the need for new local Const. & Post-Const. regulations.	Review with consultants/and city officials.
Revised					
5B	SW Ordinance	City Council	Est. regulations & guidelines to require controls and BMPs	Local BMP's are in the process of being reviewed.	Implement BMP's.
Revised					
5C	SW Ordinance	DPS	Conduct site plan review for BMPs	Site plan BMP's being reviewed.	Incorporate new BMP's.
Revised					
5D	SW Ordinance	City Council & DPS	Enforce violations and educate public	Educated customers to minimize enforcement actions.	Develop new training and workshops for local engineers, builder's construction managers and contractors. Review with city officials.
Revised					
5E	Review Ordinances	Planning Board & DPS	Subdiv. Regs. to encourage better site design practices	Researching new site designs and stormwater treatment technologies.	Review with consultants/and city officials for approval.
Revised					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – New Permit Year 1
6A	Street Sweeping	DPS	Cont. to sweep city streets	Entire city was swept.	Entire city will be swept.
Revised					
6B	Catch Basin & Storm Drain Cleaning	DPS	Cont. to clean catch basins & storm drains.	Cleaned 50% of city and the main streets, hills, and specific problem areas.	Clean remaining half of city and again the main streets, hills, and site specific areas.
Revised					
6C	Stormwater Monitoring Report	DPS/FOBL	Develop yearly monitoring report	Done by Salem Coast Watch and Friends of Peabody's Lakes.	Continue stormwater monitoring with Salem Coast Watch and Friends of Peabody's Lakes.
Revised					
6D	GIS Mapping of Storm Sewer	DPS	Map entire city storm sewer system	Continuing digitizing storm water system, 90% complete.	Continue to digitize paper maps and plans until 100% complete.
Revised					
6E	Operations & Maintenance Plans	DPS	Cont. St. sweep program	Sweep all 154 miles of city to remove debris from streets.	All of city will be swept again to remove debris from streets.
Revised					
6F	Training and Maintenance Program	DPS		All new employees receive training in haz. materials & spill cleanup, plus additional training in labeling, injuries, etc. and offer refresher courses to current employees.	Keep having all new employees go through the training process and offer refresher courses to current employees.
Revised					
6G	Storage of Hazardous Materials	DPS	Develop yearly monitoring report.	Inspect monthly per MA DEP Regulation, in compliance with Haz. Waste Regs.	Continue to inspect monthly per MA DEP Regulation, in compliance with Haz. Waste Regs.
Revised					
6H	Spill Prevention Plan	DPS	Upscale SPCC Plan	Updating plan as needed, currents contacts and current emergency response call list.	Continue action.
6I	Spill Prevention Training	DPS	Dev. O&M Plan, reduce & prevent pollutant runoff	All new employees receive training in haz. materials & spill cleanup, plus additional training in labeling, spill prevention and offer refresher courses to current employees.	Continue action.
Revised					

6J	SW Operation & Maintenance	DPS	Dev. SW O&M Program for employees	O&M Plan and BMP for City Facilities in place.	Continued use of O&M protocol.
6K	Master Plan	DPS	Incorp. BMP's in Master Plan	Incorporating BMP's.	Update as needed.
6L	Maintenance Plan	DPS	Improve plan and schedule for BMPs	Implementing spill prevention techniques.	Continue action.
6M	Identify facilities compliance	DPS	Identify # facilities & controls in compl. w/Maintenance sched.	DPS and Peabody Conservation Committee inspect city facilities annually, additional inspections may occur if needed.	Continue action.
6N	Haz. material storage	DPS	Cont. to improve hazmat. storage @municipal facilities	On going effort at all City Facilities.	Continued effort by City to properly store Haz Mats at all city facilities.
6O	SWMP pollution reduction	DPS	Identify & estimate % reduction over next five years	Help reduce 30% stormwater pollution with sediment control run-off devices and materials through site inspections, project reviews and enforcement actions.	To increase the reduction of stormwater pollution city wide.
6P	BMPs if TMDLs are set	DPS	If TMDLs are set in nxt 5 yrs, identify if BMPs meet TMDLs	N/A.	N/A.
6Q/R	Recycling & Composting & Cleanup facilities	DPS	Cont. to encourage	Press releases were generated to encourage community participation.	Continue action.
6S	Household Haz. Waste Day	DPS	Cont. to encourage and improve awareness	Press releases were generated to encourage city participation.	Continue action.
6T	Household Haz. Waste Day	DPS	Cont. to encourage use of least hazardous materials available	Press releases were generated to encourage city participation.	Continue action.

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

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Peabody's information was collected through a number of City departments, local watershed organizations, associations and volunteers. In our new permit year the City will be collecting and analyzing basic water monitoring data from several stream, ponds and lakes throughout Peabody. Water sample training is provided for all participants.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	($)	O

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	50,000
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	YES/5 miles
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	365
▪ community participation	(%)	25%
▪ material collected	(tons or gal)	1000 gal
School curricula implemented	(y/n)	N

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Approved
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	(%)	90%
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	90%
Mapping method(s)		
▪ Paper/Mylar	(%)	0
▪ CADD	(%)	0
▪ GIS	(%)	90%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	96%
% of population on septic systems	(%)	4%

Construction

Number of construction starts (>1-acre)	(#)	4
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	4
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and $)	0
Complaints/concerns received from public	(#)	0

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 every 2 yrs.
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1 every 2 yrs.
Total number of structures cleaned	(#)	5000
Storm drain cleaned	(LF or mi.)	6000LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Unknown
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	($)	0

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	N/A
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	($)	0
Vacuum street sweepers purchased/leased	(#)	0
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 %)	10%
▪ Herbicides	(lbs. or %)	10%
▪ Pesticides	(lbs. or %)	10%

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % Sand	
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 %)	5%
Salt pile(s) covered in storage shed(s)	(y/n)	Y

Storage shed(s) in design or under construction	(y/n)	No, built in 1998.

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	Y
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	Y
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N