

Municipality/Organization: CITY OF PEABODY

EPA NPDES Permit Number: MAR 05D194

MaDEP Transmittal Number: W-035400

Annual Report Number Year 15
& Reporting Period: April 1, 20017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

Contact Person: DAVID TERENCEZONI
Title: DIRECTOR, PUBLIC SERVICES

Telephone #: 978-536-7116
Email: david.terenzoni@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:



Printed Name: Edward A. Bettencourt, Jr.

Title: Mayor of Peabody

Date: 4-23-18

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.

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 increased our curbside leaves collection program from 6 weeks/year to now 12 weeks/year and provide drop off yard waste at all times throughout the year at no charge to the residents.

We sweep all city streets in the spring to remove sediment improving runoff water quality. This winter had 18 salt operations, we did not use any sand on City roads causing less stormwater sediment in our MS4 system. This past year the City cleaned approximately 625 catch basins to help ensure water quality is met. In addition, we vacuumed and flushed over 21 miles of drain lines in the downtown area, Main St. corridor and sections of South and West Peabody.

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.

The Friends of Peabody's Lakes are locally meeting 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 throughout the year.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
1A	Develop educ. resources	CD/DPS	SW Education Brochure	Placed brochures at City Hall and all Public Libraries of the 2017 Greenscapes Guide-This addresses stormwater education, pesticide application and composting. In addition, had rain garden how to manuals plus a pet waste information guide available at the DPS facility free to Peabody residents.	Continue similar action. Prepare for new permits requirements.
Revised					
1B	Develop educ. resources	DPS	SW Educational Video	Had 2 stormwater educational videos play on the City's public access station in the spring and in the fall.	Continue similar action.
Revised					
1C	Implem. educ. resources	CD	Inform people how to get involved w/local restoration	Cleaning of the North River, Proctor Brook, Goldthwaite Brook, Tapley Brook and Strongwater Brook during 2017.	Continue cleanups for North River and all major brooks throughout the city.
Revised					
1D	Implem. educ. resources	CD/DPS	Educate children of SW pollution and prevention	Provided brochures outside of our City Recreational Dept on how to make your own rain garden & outdoor and indoor water conservation tips.	Continue similar action with the addition of a pet waste informational guide.
Revised					

1E	Implem. educ. resources	CD/DPS	Cont. educ. of public using Local TV advertising & press	River cleanups were featured on Public Access and in the newspapers during 2017, plus signs and banners were place throughout the City.	Continue similar action.
Revised					
1F	Implem. educ. resources	DPS	Cont. sign posting & animal waste cleanup enforcement	Signs are annually checked and replaced as needed by the DPW. Continue to meet goal through municipal funding.	Continue action. Continue activities.
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
2A	Implem. educ. resources	CD/DPS	Inform people how to get involved w/local restoration	North River, Goldthwaite Proctor, Tapley and Strongwater brook clean up.	Continue cleanups for City water bodies.
Revised					
2B	SW Drain Stenciling	DPS/CD	Investigate program thru volunteer assistance	Stenciled areas around downtown and at the square.	Focus on sections of Central and South Peabody.
Revised					
2C	Restoration and Cleanup	CD/DPS	Cont. w/Boy Scouts/Eagle Scouts river, stream/brook and pond cleanup/restoration	North River and Browns Pond cleaned up in 2017.	Continue cleanups for City water bodies.
Revised					
2D	Public Involvement	CD/DPS/P&RD	Increase public awareness and recreational use of Crystal Lake	Had high school student's design and place nature fact signs along bike path with new vernal pool signs along path.	Update and maintain bike path environmental education signs.
Revised					
2E	Public Involvement	Salem Coastwatch	North River Seminars and Meetings	Met with Salem Coast Watch in 2017 to discuss future North River projects. Continued meeting with Salem Coast Watch to discuss watershed protection along with downstream flooding concerns as well as new MS4 permit requirements.	Continue public dialogue education and updates.
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
3A	GIS Mapping Program	DPS	Cont. to impr. & update storm sewer & drain syst. mapping	Continuing of digitizing all stormwater drains. Is on website all City employees have access.	Update website as needed.
Revised					
3B	Ident. of Illegal discharges	DPS	Cont. eliminating discharges thru map. & monitoring	No illegal discharges identified.	Continue monitoring action.
Revised					
3C	State Assessments	CD	Cont. assist w/water assessments	Implementing recommendations of watershed protection plans.	Continue action.
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
4A	SW Ordinance	DPS	Dev. & Adopt for Const. & Post-Const. regulation	Ordinance officially passed and has been adopted. Ordinance is also on city web site for all to view and follow.	Complete. Updates.
Revised					
4B	SW Ordinance	CD	Est. regulations & guidelines to require controls and BMPs	Guidelines and BMPs are being updated.	Continue action.
Revised					
4C	SW Ordinance	Planning Board	Conduct site plan review for BMPs	Educating employees and include in city project reviews.	Continue action.
Revised					
4D	SW Ordinance	DPS/CD	Enforce violations and educate public	Educated customers to minimize enforcement actions. Local emergency and equipment rental contractors trained.	Continue similar action.
Revised					
4E	Review Ordinances	CD	Subdiv. Regs. to encourage better site design practices	Researching new site designs, LID and pollution prevention and BMP alternatives.	Continue with reviewing overall feasibility of new alternatives.
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
5A	SW Ordinance	DPS	Dev. & Adopt for Const. & Post-Const. regulation	Ordinance officially passed and has been adopted. Ordinance is also on city web site for all to view.	Complete. Updates.
Revised					
5B	SW Ordinance	DPS/CD	Est. regulations & guidelines to require controls and BMPs	Local BMP's are being implemented.	Continue action.
Revised					
5C	SW Ordinance	DPS	Conduct site plan review for BMPs	Encourage Low Impact Development for all new construction in the City.	Continue action.
Revised					
5D	SW Ordinance	City Council & DPS	Enforce violations and educate public	Educated customers and contractors to minimize enforcement actions.	Continue action.
Revised					
5E	Review Ordinances	Planning Board & DPS	Subdiv. Regs. to encourage better site design practices	Encourage (LID) and stormwater treatment technologies for all new subdivisions.	Continue action.
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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
6A	Street Sweeping	DPS	Cont. to sweep city streets	Entire city was swept.	Entire city will be swept twice a year.
Revised					
6B	Catch Basin & Storm Drain Cleaning	DPS	Cont. to clean catch basins & storm drains.	Cleaned all the main streets, hills, all of the downtown and specific problem areas in South and West Peabody.	Continue action.
Revised					
6C	Stormwater Monitoring Report	DPS/FOPL	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	Digitized storm water system complete.	Update as needed.
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 twice a year.
Revised					
6F	Training and Maintenance Program	DPS	Conduct refresher training once a year.	Training in haz. materials & spill cleanup, plus additional training in labeling, injuries, etc.	Continue action.
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.	Continue action.
6I	Spill Prevention Training	DPS	Conduct refresher training once a year.	Training in haz. materials & spill cleanup, plus additional training in labeling, spill prevention.	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 and pollution prevention techniques.	Continue action.
6M	Identify facilities compliance	DPS	Identify # facilities & controls in compl. w/Maintenance sched.	DPS inspect city facilities annually, additional inspections may occur if needed.	Continue action.
6N	Haz. material storage	DPS/FD	Cont. to improve hazmat. storage @municipal facilities	On going effort at all City Facilities.	Continued effort by City Fire Department to properly store Haz Mats at all city facilities.
6O	SWMP pollution reduction	DPS	Identify & estimate % reduction over next five years	Help reduce overall stormwater pollution with sediment control run-off devices, stormwater systems and 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 and brochures were generated to encourage community participation.	Continue action.
6S	Household Haz. Waste Day	DPS	Cont. to encourage and improve awareness	Press releases and brochures 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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
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. The City will be collecting and analyzing basic water monitoring data from city streams, ponds and lakes throughout Peabody. Water sample training is provided for all participants by the City.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	Yes, staffed
Annual program budget/expenditures	(\$)	Expenditures about \$100K

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	51,200
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	YES/15 miles
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	365
▪ community participation	(%)	About 40%
▪ material collected	(tons or gal)	About 2125 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	(%)	YES
Estimated or actual number of outfalls	(#)	500+
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	0
▪ CADD	(%)	0
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
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)	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	3
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	(%)	100%
Site inspections completed	(# or %)	100%
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 yr.
Total number of structures cleaned	(#)	625
Storm drain cleaned	(LF or mi.)	21mi
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	(#)	Y
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 %)	20%
▪ Herbicides	(lbs. or %)	20%
▪ Pesticides	(lbs. or %)	20%

Anti-/De-Icing products and ratios	% NaCl	0%
	% CaCl ₂	70%
	% Sand	30%

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 %)	15%
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