

Municipality/Organization: Massachusetts Department of Correction
MCI-Concord

EPA NPDES Permit Number: MAR 042016

MaDEP Transmittal Number: W-041203

Annual Report Number & Reporting Period: April 1, 2016 – March 31, 2017

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

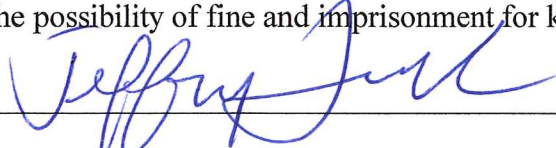
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Certification:

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: 

Printed Name: Jeffrey J Quick, A.I.A.

Title: Director, Division of Resource Management

Date: 11/10/2017

Part II. Self-Assessment

The Department of Correction (DOC) received correspondence from the Environmental Protection Agency (EPA) on May 28, 2004 determining the Notice of Intent (NOI) submission was administratively complete. From the time the NOI's were prepared and before they were submitted the DOC began a prioritization list of areas for investigation including but not limited to:

- Entry Points into the storm drainage system(s) maintained by the DOC.
- Documentation of discharges points on and off the DOC property.
- Coordination with Town(s) that are also MS4s
- Illicit connections identification (None were found).
- Investigation of infrastructure and identification of problem drainage areas.

Each DOC operation was critically evaluated to determine what repairs were necessary. In summary, the storm drainage systems operated by the DOC are not combined system where sewer and storm water discharged.

Many of the milestones and goals have been met – most are still in progress. The major accomplishment is that the storm drains are being systematically cleaned. All of the catch basins have been stenciled at the facility but will require additional stenciling this coming year. Concerns have been expressed that labeling of the storm drains inside the secure part of the facility presents a security issue.

Over the past few years, there have been documented issues with one of the outfalls that empties into the Assabet River. The specific discharge point has had direct connection to the existing storm drain system. Improper dumping of wash water and other liquid wastes from the kitchen was one of many identified sources. It was also found that a bathroom, showers and other domestic drains were tied into or had failed and were introducing bacteria and other discharges into the storm drain system. While periodic inspections of the outfall have been completed, sampling after suspected discharges from the pipe has been coordinated with MassDEP.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
1 Revised No	Publicize/Present SW Program to staff	Div. of Res. Management	Publicize and Present Program to	Conduct facility specific training with maintenance staff and other stakeholders in this program.	Continue with additional formal training as funding has been identified and new staff comes on board.
2 Revised No	Distribute Printed Materials	Div. of Res. Management	Create and Post Material	Provide written updates and progress reports to management staff. Monthly and as needed. DRM project tracking is done over the course of a year.	Provide written updates and progress reports to management staff
3 Revised Yes/New	Intranet Posting Preparation of Newsletter	Div. of Res. Management	Post Materials	Completed separate Intranet page. In addition to providing links to EPA website on the DOC INTRANET page.	Intranet page within the DOC was completed. Periodic updates are needed.
4 Revised No	Stenciling	Div. of Res. Management	Complete stenciling	Limited stenciling due to security concerns.	Need to reevaluate -Repainting of stenciling needed
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
5	Form Stormwater Committee	Div. of Res. Management	Form Committee	Formed Stormwater Committee that is part of the DOC's State Sustainability Council	DRM to take lead and use facility staff for onsite observations.
Revised No					
6	Staff input	Div. of Res. Management	Solicit Input and Implement Ideas	Input has been received. Mostly where investigation is needed or cleaning and maintenance are necessary. Have reviewed issues at Concord with our Fiscal to stress the need to be proactive with maintenance.	Continue with staff education.
Revised No					
Revised					
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
7 Revised	Map Drain System	Div. of Res. Management	Complete Mapping	Mapping completed.	Additional information to be added that include other underground utilities as a result of river discharge.
8 Revised	Dry/Wet Weather Surveys	Div. of Res. Management	Document and Prioritize	Prioritize those catch basins that require repairs. Cleaning of catch basins at vehicle trap to be put on more frequent cleaning schedule.	Clean and inspect catch basins.
9 Revised	Correct Problems	Div. of Res. Management	Make Repairs and Document	Address any new discharges and make procedural changes.	Address any new discharges and make procedural changes.
10 Revised	Policy for Enforcement	Div. of Res. Management	Prepare Policy	Policy in place that ties in sustainable practices with this BMP.	Update policy as needed. Review for improvements.
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
11 Revised	Construction Management	Div. of Res. Management	As Necessary	None Planned	None Planned
Revised					
Revised					
Revised					
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
12	Post Construction Activities	Div. of Res. Management	As Required	None	None Planned
Revised					
Revised					
Revised					
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
13 Revised	Develop O&M Plan	Div. of Res. Management		Worked on plan that has catch basins cleaned every 12 to 18 months.	Continue with evaluation of program
14 Revised	Execute O&M Plan	Div. of Res. Management		Limited funding did not allow all work to be completed, although some major maintenance and improvements made.	Review and Execute O&M Plan
15 Revised	Long Term Planning	Div. of Res. Management		Evaluated what is needed to implement O&M plan.	Modify as necessary
Revised					
Revised					
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 14
	Need to collect sample outfall.	DRM	Annual sample	Continue with periodic inspections to river outfall into the Assabet River	Continue with periodic inspections to river outfall.
Revised Yes					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Concord and NECC Facilities has one outfall. The NECC facility discharges to a vegetated swale but doesn't have a connection with surface waters. The Concord facility discharges into the Assabet River.

Currently the DOC undertakes monthly sampling for surfactants and bacteria (e. Coli) for the lone out fall into the Assabet River. The test results are forwarded to the Regional DEP office as part of the monthly plant operational report. During the month, the two catch basins located in the vicinity of the kitchen are cleaned out by a septic contractor - these were previously identified as sources impacting the River.

The DOC is currently working on a cope to conduct an investigation identifying any tie-ins to the discharge pipe. Previous investigations have located a shower and bathroom that was connected to the discharge pipe.

During the summer of 2010, a white discharge was noted coming into the Assabet River from the DOC stormwater outfall. Through extensive investigation, a break in a sewer line and cracked drains were found to be seeping into the storm drains. This problem has been corrected, however in early 2013, e-coli was found in the outfall water. The facility has begun conducting routine inspections of the outfall, since this incident in addition to the sampling outlined above.

Currently, inmate labor is used to pick up litter and other roadside debris several times per year.

No illicit connections were found.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	Yes	Staffed by DRM
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	NA	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management				
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X	X	X
▪ Post-Development Stormwater Management		X		

Mapping and Illicit Discharges

Outfall mapping complete	100%	
Estimated or actual number of outfalls	One (1)	
System-Wide mapping complete	(100%)	
Mapping method(s)		
▪ Paper/Mylar	100 %	
▪ CADD	0%	
▪ GIS	98 %	
Outfalls inspected/screened	10 %	
Illicit discharges identified	Zero (0)	

Illicit connections removed	NA	
% of population on sewer	(100 %)	
% of population on septic systems	(0%)	

Construction

Number of construction starts (>1-acre)	None	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	NA	
Site inspections completed	NA	
Tickets/Stop work orders issued	NA	
Fines collected	NA	
Complaints/concerns received from public	None	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	NA – 0%	
Site inspections completed	NA	
Estimated volume of stormwater recharged	NA	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	None	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	NA	
Total number of structures cleaned	2	In year 5 of permit
Storm drain cleaned	None	

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)	NA	
Average frequency of street sweeping (commercial/arterial or other critical streets)	0/yr contract	
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	Contracted Services	
Vacuum street sweepers specified in contracts	NO	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	NA	
▪ Herbicides	NA	
▪ Pesticides	NA	

Anti-/De-Icing products and ratios	0% NaCl 0% CaCl ₂ 0% MgCl ₂ 0% CMA 0% Kac 0% KCl 0% Sand	Figures not available
Pre-wetting techniques utilized	-	
Manual control spreaders used	-	
Automatic or Zero-velocity spreaders used	-	
Estimated net reduction in typical year salt application	TBD	
Salt pile(s) covered in storage shed(s)	Yes	
Storage shed(s) in design or under construction	NA	