P 5/15/08

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, 2007 – March 31, 2008

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: Jeffrey J Quick

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

Title: Director, Division of Resource Management

Date: 5/09/2008

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.

The DOC has held numerous training sessions with the DOC executive board, the Directors of Engineering and Environmental Health and Safety Staff. Training will continue through the summer and in the later part of the current fiscal year and next fiscal year as funding becomes available. Training included an introduction of the program, the importance of the program and goals that were set for the first 5 years of the permit program.

Many of the milestones and goals have been met - others 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.

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 – Permit Year 6
1	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 training as funding is identified.
Revised No					
2	Distribute Printed Materials	Div. of Res. Management	Create and Post Material	Provide written updates and progress reports to management staff.	Provide written updates and progress reports to management staff
Revised No					
3	Intranet Posting	Div. of Res. Management	Post Materials	Completed separate Intranet page.. In addition, a newsletter that highlighted the Stormwater Phase II program was completed and distributed.	Periodic updates as needed.
Revised Yes/New	Preparation of Newsletter				
4	Stenciling	Div. of Res. Management	Complete stenciling	100 % Stenciling completed .	Upkeep will be required.
Revised No					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
5	Form Stormwater Committee	Div. of Res. Management	Form Committee	Formed Stormwater Committee that is part of the DOC's State Sustainability Council	Committee to meet every two to three months
Revised No					
6	Staff input	Div. of Res. Management	Solicit Input and Implement Ideas	Input has been received. Investigation and some locations prioritized. Repairs are necessary. Recently 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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
7	Map Drain System	Div. of Res. Management	Complete Mapping	Mapping completed.	Annual inspections and update as needed.
Revised					
8	Dry/Wet Weather Surveys	Div. of Res. Management	Document and Prioritize	Two storm drains require minor repairs. Funding limited ability to make any repairs.	Prioritize those catch basins that require repairs in FY2009. Cleaning of catch basins at vehicle trap to be scheduled.
Revised					
9	Correct Problems	Div. of Res. Management	Make Repairs and Document	Limited budget prevented all repairs and improvement from being made.	Pending budget catch basin and piping repairs as needed
Revised					
10	Policy for Enforcement	Div. of Res. Management	Prepare Policy	Stormwater Committee to be charged with preparation of policy. Policy in place that ties in sustainable practices with this BMP.	Update policy as needed. Review for improvements.
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 – Permit Year 6
11	Construction Management	Div. of Res. Management	As Necessary	**No Activity**	**Installation of Photovoltaic system on site will require erosion control plan.**
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
12	Post Construction Activities	Div. of Res. Management	As Required	**No Activity**	**Installation of Photovoltaic system on site will require erosion control plan.**
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
13	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
Revised					
14	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
Revised					
15	Long Term Planning	Div. of Res. Management		Evaluated what is needed to implement O&M plan.	Modify as necessary
Revised					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
	Need to collect sample outfall.	DRM	Annual sample	Dry spell during the permit year limited opportunities to sample.	Need to time sample collection with rainfall events.
Revised Yes					
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. Several attempts have been made to collect samples for TMDL sampling. The DOC has not been able to time it when sample collection could take place with rainfall events. The limited number of drain lines and outfall have been well documented. The primary drainage system discharges into a detention basin on the property maintained by the DOC. The coming year will require new efforts for catch basin cleaning and other drain maintenance.

A sewer overflow that resulted from a blockage in the piping occurred in April and May 2007 that was reported to DEP. The sewer overflow did in fact enter the storm drain system. The exact quantity is not known but is estimated at several hundred gallons. Most of the sewage overflow was contained to the ground surface.

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

Estimated number of residents reached by education program(s)	100%	DOC Staff
Stormwater management committee established	Yes	
Stream teams established or supported	No	
Shoreline clean-up participation or quantity of shoreline miles cleaned	NA	
Household Hazardous Waste Collection Days	NA	
▪ 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	0 %	
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 3 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	