

Municipality/Organization: Massachusetts Department of Correction
Bridgewater Correctional Complex

EPA NPDES Permit Number: MAR 042013

MaDEP Transmittal Number: W-041205

Annual Report Number & Reporting Period: April 1, 2010 – March 31, 2011

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: 3/29/2011

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 Towns that are also MS4s
- Illicit connections identification (None were found).
- Investigation of infrastructure and identification of problem drainage areas.

Seven catch basins at the complex were cleaned this year past permit year alone with a repair of a collapsed drain line. Some projects that were undertaken improved drainage and directed run-off to swaled or grass areas.

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 fourth year milestones and goals have been met - others are still in progress. The major accomplishment is that the storm drains are being inspected and systematically cleaned. Catch basins need to be stenciled at the facility. 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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
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 training as funding is identified.
2 Revised No	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
3 Revised Yes/New	Intranet Posting Preparation of Newsletter	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.
4 Revised No	Stenciling	Div. of Res. Management	Complete stenciling	No Stenciling completed this year due to operations and other security issues.	Management review of what catch basins to be stenciled.
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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
5 Revised No	Form Stormwater Committee	Div. of Res. Management	Form Committee	Formed Stormwater Committee that is part of the DOC's State Sustainability Council	Committee goals to meet annually.
6 Revised No	Staff input	Div. of Res. Management	Solicit Input and Implement Ideas	Input has been received. Mostly where investigation is needed or repairs are necessary.	Continue with staff education.
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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
7 Revised	Map Drain System	Div. of Res. Management	Complete Mapping	Mapping completed. Updates to base map being completed to include other utilities and evaluate drain lines.	Annual inspections and update as needed.
8 Revised	Dry/Wet Weather Surveys	Div. of Res. Management	Document and Prioritize	Wet weather survey did not identify piping problem. Some repairs made.	Continue to evaluate catch basins and those that require repairs.
9 Revised	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
10 Revised	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					

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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
11 Revised	Construction Management	Div. of Res. Management	As Necessary	Installation of Photovoltaic system on site will require erosion control plan. Area is less than one acre. Area has been inspected and stabilized.	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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
12	Post Construction Activities	Div. of Res. Management	As Required	Installation of Photovoltaic system on site will require erosion control plan. Area is less than one acre. Area has been inspected and stabilized.	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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
13 Revised	Develop O&M Plan	Div. of Res. Management		Catch Basins routinely inspected. Some catch basins cleaned.	Continue with evaluation of program
14 Revised	Execute O&M Plan	Div. of Res. Management		Some work completed like minor repairs and cleaning - although some major maintenance not completed due to lack of funding.	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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
	NA			NA	NA
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

At the Bridgewater Complex, the location of the drain lines and outfalls have been identified. The primary drainage system discharges into vegetated swales on the property maintained by the DOC. In summary, the DOC has a very good understanding of the drainage system and has taken the necessary steps to prevent pollution from entering the drain system. The coming year will require new efforts for catch basin cleaning, repairs and other drain maintenance.

Photovoltaic Project Completed and area has been atabilized.

Significant steps were taken to clean slow draining catch basins and to inspect other catch basins more frequently.

No illicit connections were found. Currently, inmate labor is use to pick up litter and other road side debris several times per year.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

	YES	Staff by DRM
Stormwater management position created/staffed		
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	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	NA	
Household Hazardous Waste Collection Days	NA	
<ul style="list-style-type: none"> ▪ days sponsored ▪ community participation ▪ material collected 	(#) (%) (tons or gal)	
School curricula implemented	NA	
Recycling	1400 tons	

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			X
▪ Post-Development Stormwater Management				
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		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	(Nine (9))			
System-Wide mapping complete	(100%)			
Mapping method(s)				
▪ Paper/Mylar	100 %			
▪ CADD	100%			
▪ GIS	20 %			
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)	1 time / year	Every few years.
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	NA	
Total number of structures cleaned	12	10-15
Storm drain cleaned	Up to 30	In permit yr. 5
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	(\$)	unk
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	Use DOC inmate labor too
Vacuum street sweepers specified in contracts		

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	0-15% NaCl 0% CaCl ₂ 0% MgCl ₂ 0% CMA 0% K _{ac} 0% KCl 85-100% Sand	Sand provided by local Highway Department
Pre-wetting techniques utilized	-	
Manual control spreaders used	YES	
Automatic or Zero-velocity spreaders used	-	
Estimated net reduction in typical year salt application	TBD	
Salt pile(s) covered in storage shed(s)	NA	
Storage shed(s) in design or under construction	No	No Storage