

Municipality/Organization: Massachusetts Department of Correction
Norfolk/Walpole Complex (MCI-Norfolk, MCI-
Walpole, Bay State Correctional Center and
Pondville Correctional Center)

EPA NPDES Permit Number: MAR 042015

MaDEP Transmittal Number: W-041200

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

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

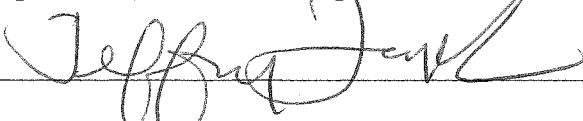
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Certification:

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

Through the State of Massachusetts Clean State Program, two oil-water separators were installed to handle parking lot drainage three years before the Phase II program required a NOI to be submitted. This permit deals with four distinct prison facilities yet all empty into a single drainage basin. In summary, the storm drainage systems operated by the DOC are not combined system where sewer and storm water discharged. However, several connections were documented within the MCI-Norfolk facility where stormwater does in fact enter the sewer system. The DOC has made huge efforts to remove I&I; to date the volume removed is about 80,000 gallons per day – the sources included groundwater sumps, and other drainage issues. Additional work to correct these connections in the next year and necessary steps will be taken to plug, terminate or redirect these connections.

During this permit period a new membrane filtration plant began construction to replace the failing package treatment plant. Expected construction completion is the following permit year. The area affected is under an acre.

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 first year milestones and goals have been met - others are still in progress. The drainage systems that serve the facilities are now well understood including those that need repairs.

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	Completed presentations to management and directors	Conduct facility specific training with maintenance staff and other stakeholders in this program.
2 Revised No	Distribute Printed Materials	Div. of Res. Management	Create and Post Material	During the training handouts were distributed regarding the program	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.	Intranet page within the DOC was completed. In addition, a quarterly newsletter that highlights the program and progress will be distributed.
4 Revised No	Stenciling	Div. of Res. Management	Complete stenciling	Stenciling has been limited due to security concerns. Goal is another 20% or more of stenciling.	Selective Stenciling is in order but need to establish procedure department wide.
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 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					
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.	Continue with mapping of outfalls with GIS software. Integrate outfalls with large comprehensive mapping.
8 Revised	Dry/Wet Weather Surveys	Div. of Res. Management	Document and Prioritize	Relining of sewer had occurred in 1997 and 1998 for Norfolk and Walpole. Wet weather survey did not identify piping problem. Storm drains do require minor repairs. Funding limited ability to make any repairs. Minor paving repairs completed.	Prioritize those catch basins that require repairs.
9 Revised	Correct Problems	Div. of Res. Management	Make Repairs and Document	Pending budget catch basin and piping repairs as needed	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	Construction began on MBR Plant at Waste Water Treatment Plant	Monitoring of construction site
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	Monitoring of construction site	Monitoring of construction site
Revised					
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		Worked on plan that has catch basins cleaned every 12 to 18 months. Spring collection of sand and trash pick-up twice per year. Nearly 1,200 feet of drain lines were cleaned, catch basins inspected.	Continue with periodic maintenance and 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					
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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
	NA			N/A	N/A
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Norfolk Wapole Complex has several outfalls that indirectly discharge to the Stop River. The limited number of drain lines and outfalls 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.

The Norfolk Facility had work completed during this permit period- Construction of the a new MBR Plant.

Parking lots at Norfolk/Walpole and Bay State swept. Pondville and Cedar Junction outfalls was cleared of vegetation.

Currently inmate labor is used to pick up litter and other road side debris twice during the past 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	(\$)0	

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	Yes	DRM Staff
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)	Unknown
School curricula implemented	NA	
Recycled Material	tons	1000 tons

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place			
	Prior to Phase II	Under Review	Drafted	Adopted
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management				X
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	Three (3)
System-Wide mapping complete	(100%)
Mapping method(s)	
▪ Paper/Mylar	100 %
▪ CADD	100%
▪ GIS	30%
Outfalls inspected/screened	100 %
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

	1 time / year	In permit yr. 5
Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	As funds available	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	0	0
Total number of structures cleaned	0	0
Storm drain cleaned	(lbs. or tons)	.5
Qty. of screenings/debris removed from storm sewer infrastructure	Ben Use	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	(\$)	2.5K
Cost of screenings disposal		

Average frequency of street sweeping (non-commercial/non-arterial streets)	NA	1x per year
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	0-20% NaCl 0% CaCl ₂ 0% MgCl ₂ 0% CMA 0% Kac 0% KCl 80-100% Sand	
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)	No	Centralized on-site storage
Storage shed(s) in design or under construction	NA	