

APR 07 2016

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, 2015 – March 31, 2016

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Jeffrey J. Quick, A.I.A. Title: Director, Division of Resource Management

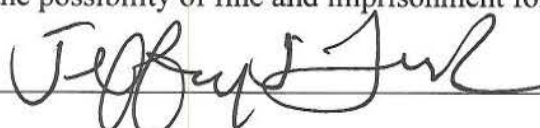
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Certification:

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: April 05, 2016

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.

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

Over the past year (in 2014) nearly all catch basins on the complex were cleaned. However, the snow fall in 2014 through 2015, extensive sweeping and sand removal from the catch basins will be a Department Wide Initiative.

As noted in last year's report additional paving totaling about 35,000 square feet was completed. This section of roadway was delayed due to some water line repairs, hydrant replacement and valve replacement.

As noted in last year's report a cooperative effort with Norfolk County Mosquito Control was undertaken. The County has conducted followup surveys to observe work. The record snow fall of 2014 -2015 finally melted in June 2015. No drainage issues were found.

In the upcoming permit year, a new water treatment plant will be constructed. This area is located within the water supply well fields in Norfolk, MA. An Order of Conditions has been procured from the Town of Norfolk. The expected work area is approximately one acre of disturbed area including installation of new underground lines in areas that are paved or part of the existing infrastructure. A NPDES general Permit will be submitted.

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1 Revised No	Publicize/Present SW Program to staff	Div. of Res. Management	Publicize and Present Program to	Completed presentations to management and directors	Continue 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 was not completed	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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
5	Form Stormwater Committee	Div. of Res. Management	Form Committee	Work with the State's Leading By Example and State Sustainability Council	With retirements and personnel changes, need to establish new facilities contacts.
Revised No					
6	Staff input	Div. of Res. Management	Solicit Input and Implement Ideas	Input has been received. Investigation and some locations prioritized. 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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
7 Revised	Map Drain System	Div. of Res. Management	Complete Mapping	Mapping completed.	Annual inspections and update as needed.
8 Revised	Dry/Wet Weather Surveys	Div. of Res. Management	Document and Prioritize	Prioritize those catch basins that require repairs. 10 catch basins were repaired and/or rebuilt	Prioritize those catch basins that require cleaning and /or repairs.
9 Revised	Correct Problems	Div. of Res. Management	Make Repairs and Document	Budgeting for cleaning catch basins approved to carry on in subsequent years.	Routine inspections and cleaning as required.
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					

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
11 Revised	Construction Management	Div. of Res. Management	As Necessary	None	Construction of new filter plant. NPDES permit to submitted for general construction.
	Roadway Work			None planned	None planned
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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
12	Post Construction Activities	Div. of Res. Management	As Required	None	Some work proposed at water supply wells. Monitoring of construction site
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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
13 Revised	Develop O&M Plan	Div. of Res. Management		Catch basins cleaned every 12 months. Spring collection of sand and trash pick-up crews mobilized at least monthly.	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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
	NA			N/A	N/A
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. Extensive drainage work was completed in 2014 included offsite adjacent properties. The DOC also completed inspections of large culverts at the Stop River and under the Clark Street Drainage system. Future work with the Town of Norfolk will be required.

There is work proposed for the coming year at the Well Field. Construction is expected to occur this coming permit year.

Parking lots at Norfolk/Walpole and Bay State are in the process of being swept due to the extreme winter we just had. Trash and brush removal from along access roads and main highways.

Currently inmate labor is used to pick up litter and other road side debris nearly every month during the past year.

No illicit connections were found.

The Sand and Salt storage building at Cedar Junction was rebuilt.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	YES	Staffed by DRM
Annual program budget/expenditures	(\$)72,000*	DRM Staff

* amount is part of a larger budget and project.

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	2600	tons

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				X
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X		X
▪ Post-Development Stormwater Management		X		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	100%	
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

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	1 time / year	In permit yr. 5
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	As funds available	Funding is now budgeted
Total number of structures cleaned	0	0
Storm drain cleaned	0	0

Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	1.0 +
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Ben Use	
Cost of screenings disposal	(\$)	2.5K

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)	3 yards
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	Contracted	
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	Yes	At Cedar Junction
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	Centralized on-site storage
Storage shed(s) completed	Yes	Completed at Cedar Junction