

APR 07 2016

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

P

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

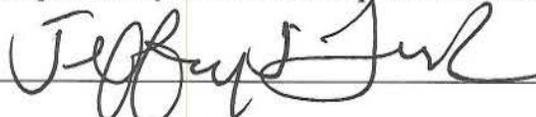
Telephone #: (508) 422- 3661

Email Jeffrey.Quick@state.ma.us

Mailing Address: 50 Maple Street, Milford, MA 01757

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 | 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. |
| Revised No | | | | | |
| 2 | 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 |
| 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. | Intranet page within the DOC was completed. In addition, a quarterly newsletter that highlights the program and progress will be distributed. |
| Revised Yes/New | Preparation of Newsletter | | | | |
| 4 | 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 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 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 | | | | | |

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. |
| Revised | Roadway Work | | | None planned | None planned |
| 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 | | | | | |

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 | | | | | |

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 | | | | | |

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 |