

Municipality/Organization: Massachusetts Department of Correction
MCI-Shirley Complex

EPA NPDES Permit Number: MAR042006

MADEP Transmittal Number: W-041201

Annual Report Number & Reporting Period: April 1, 2006 – March 31, 2007

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: 4/20/2007

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.**

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 first year milestones and goals have been met - others are still in progress due to financial issues.

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 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|---------------------|---|--------------------------------------|----------------------------------|---|--|
| 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 formal training as funding has been identified. |
| 2 Revised No | Distribute Printed Materials | Div. of Res. Management | Create and Post Material | Provide written updates and progress reports to management staff. Monthly and | Provide written updates and progress reports to management staff |
| 3 Revised Yes | 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. Periodic updates |
| 4 Revised No | Stenciling | Div. of Res. Management | Complete stenciling | Stenciling continues. | Complete another 20% or more of stenciling. |
| Revised | | | | | |
| Revised | | | | | |

1a. Additions

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2. Public Involvement and Participation

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|-----------------|---------------------------|--------------------------------------|-----------------------------------|--|---|
| 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. Few repairs are necessary. | Continue with staff education |
| Revised No | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

2a. Additions

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3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|------------------|-------------------------|-------------------------------|---------------------------|--|--|
| 7 Revised No | Map Drain System | Div. of Res. Management | Complete Mapping | Mapping completed. Outfall locations sent to EPA during NOI submittal. Began work mapping outfalls with GIS software. | Continue with mapping of outfalls with GIS software. Integrate outfalls with large comprehensive mapping . |
| 8 Revised No | Dry/Wet Weather Surveys | Div. of Res. Management | Document and Prioritize | Relining of sewer had occurred in 2000 for NCCI. Wet weather survey did not identify piping problem. | Prioritize those drainage system repairs. |
| 9 Revised No | Correct Problems | Div. of Res. Management | Make Repairs and Document | No areas identified area that need immediate repair. | Pending budget catch basin and piping repairs as needed. |
| 10 Revised No | 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

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4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|---------------|-------------------------|-------------------------------|--------------------|---|------------------------------------|
| 11 Revised | Construction Management | Div. of Res. Management | As Necessary | No Activity | None Planned |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

4a. Additions

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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 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|-----------------|------------------------------|--------------------------------------|---------------------------|---|---|
| 12 | Post Construction Activities | Div. of Res. Management | Annual Inspection | No Activity | None Planned |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

5a. Additions

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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 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|---------------------|------------------------|--------------------------------------|---------------------------|--|---|
| 13 Revised No | Develop O&M Plan | Div. of Res. Management | O&M Plan to be developed | Worked on plan that has catch basins cleaned every 12 to 18 months. | Continue with evaluation of program |
| 14 Revised No | 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 No | Long Term Planning | Div. of Res. Management | Reevaluate O&M Plan | Evaluated what is needed to implement O&M plan. | Modify as necessary |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

6a. Additions

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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 3 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|-----------------|------------------------|--------------------------------------|---------------------------|---|---|
| | NA | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

7a. Additions

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7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

At the Shirley Complex, the location of the drain lines and outfall have been identified. The last year has been spent organizing information, compiling new information and sorting new information as it comes in. In summary, the DOC has a very good understanding on 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 street sweeping, catch basin cleaning, repairs and other drain maintenance.

Currently inmate labor is used to pick up litter and other road side debris several times per year.

No illicit connections were found.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

| | | |
|--|------|--------------|
| Stormwater management position created/staffed | YES | Staff by DRM |
| Annual program budget/expenditures | (\$) | |
| | | |
| | | |

Education, Involvement, and Training

| | | |
|---|---------------|--|
| Estimated number of residents reached by education program(s) | 20% | |
| 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 | |
| ▪ 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 | | 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 | (One (1)) | |
| System-Wide mapping complete | (100%) | |
| Mapping method(s) | | |
| ▪ Paper/Mylar | 100 % | |
| ▪ CADD | 0% | |
| ▪ GIS | 10 % | Grant applied for software |
| 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. 2 |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) | NA | |
| Total number of structures cleaned | 0 | |
| Storm drain cleaned | 6-12 | |
| 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) | TBD | |
| 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 | TBD | |
| | | |
| | | |

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|--|----|--|
| Reduction in application on public land of: ("N/A" = never used; "100%" = elimination) | | |
| ▪ Fertilizers | NA | |
| ▪ Herbicides | NA | |
| ▪ Pesticides | NA | |
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| Anti-/De-Icing products and ratios | 10% NaCl 0% CaCl ₂ 0% MgCl ₂ 0% CMA 0% Kac 0% KCl 90% 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) | Yes | |
| Storage shed(s) in design or under construction | NA | |
| | | |