

**Municipality/Organization:** Massachusetts Department of Correction  
North Central Correctional Center (NCCI)

---

**EPA NPDES Permit Number:** MAR 042007

---

**MADEP Transmittal Number:** W-041202

---

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

---

## **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) 541-5301 x11 **Email:** [JJQuick@doc.state.ma.us](mailto:JJQuick@doc.state.ma.us)

---

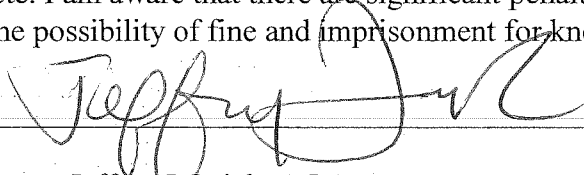
**Mailing Address:** 21 Needham Street, Norfolk, MA 02056

---

#### 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:**

3/29/2012

---

## 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, NCCI had an oil-water separator (OWS) installed to handle parking lot drainage three years before the Phase II program required a NOI to be submitted. Each DOC operation was critically evaluated to determine what repairs were necessary. In summary, the storm drainage systems operated by the DOC at Gardner are not combined systems where sewer and storm water is discharged. The OWS is inspected approximately every six months and is cleaned as necessary.

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. Ongoing and informal training has continued more so on a case by case basis.

The major accomplishment is that the storm drains are being systematically cleaned. Minor repairs are such as patching asphalt, and fixing catch basin rims are required and are expected to be addressed as funding becomes available. Other than the two projects mentioned above there were no major repairs made during the last permit year.

During this permit year, a sewage overflow occurred and sewage flowed into abandoned filter beds associated with the old waste water treatment plant. A contractor removed the waste and DEP was notified.

### 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<br>(Reliance on non-municipal partners indicated, if any)                                                | Planned Activities – Permit Year 8                                     |
|-------------------------|-----------------------------------------------|-------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 1<br>Revised<br>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 training on a case by case and as funding is identified. |
| 2<br>Revised<br>No      | Distribute Printed Materials                  | Div. of Res. Management       | Create and Post Material         | Provide written updates and progress reports to management staff.                                                                            | Provide progress reports to management staff                           |
| 3<br>Revised<br>Yes/New | Intranet Posting<br>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<br>Revised<br>No      | Stenciling                                    | Div. of Res. Management       | Complete stenciling              | Stenciling was limited due to security concerns.                                                                                             | Maintenance is required but concerns have been raised about security.  |
| 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<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 8         |
|--------------------|---------------------------|-------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------|
| 5<br>Revised<br>No | Form Stormwater Committee | Div. of Res. Management       | Form Committee                    | Formed Stormwater Committee that is part of the DOC's State Sustainability Council            | Committee needs to meet every three months |
| 6<br>Revised<br>No | Staff input               | Div. of Res. Management       | Solicit Input and Implement Ideas | Input has been received. Investigation and some locations prioritized. 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<br>(Reliance on non-municipal partners indicated, if any)                                                       | Planned Activities – Permit Year 8                      |
|---------------|-------------------------|-------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 7<br>Revised  | Map Drain System        | Div. of Res. Management       | Complete Mapping          | Mapping completed.                                                                                                                                  | Annual inspections and update as needed.                |
| 8<br>Revised  | Dry/Wet Weather Surveys | Div. of Res. Management       | Document and Prioritize   | Storm drains require minor repairs. Funding limited ability to make any repairs. Minor paving repairs completed. One section of drain line replaced | Prioritize those catch basins that require repairs.     |
| 9<br>Revised  | Correct Problems        | Div. of Res. Management       | Make Repairs and Document | Repair to drain line completed.                                                                                                                     | Pending budget catch basin and piping repairs as needed |
| 10<br>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<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 8    |
|---------------|-------------------------|-------------------------------|--------------------|-----------------------------------------------------------------------------------------------|---------------------------------------|
| 11<br>Revised | Construction Management | Div. of Res. Management       | As Necessary       | No Activity                                                                                   | Installation of 2 large windturbines. |
| 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<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 8                                                                                                      |
|----------|------------------------------|-------------------------------|--------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 12       | Post Construction Activities | Div. of Res. Management       | As Required        | No Activity                                                                                   | Upon complete, regular maintenance plans to be implemented .<br>Maintenance of stabilized areas, removal of erosion control structures. |
| 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<br>(Reliance on non-municipal partners indicated, if any)                  | Planned Activities – Permit Year 8                     |
|---------------|--------------------|-------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 13<br>Revised | Develop O&M Plan   | Div. of Res. Management       |                    | Worked on plan that has catch basins cleaned every 12 to 18 months.                                            | Continue with evaluation of program funding is limited |
| 14<br>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<br>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<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities -- Permit Year 8 |
|----------|-----------------|-------------------------------|--------------------|-----------------------------------------------------------------------------------------------|-------------------------------------|
|          | NA              |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |
| Revised  |                 |                               |                    |                                                                                               |                                     |

7a. Additions

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|  |  |  |  |  |  |

7b. WLA Assessment

#### Part IV. Summary of Information Collected and Analyzed

At the NCCI, the locations of the drain lines and outfalls have been identified. Some improvements completed this year were repairs to a few catch basins were made and repair of a drain line the facility grounds. Catch basins were inspected and some were cleaned (although limited) due to budget issues. The coming year will require new efforts for catch basin cleaning, repairs and other drain maintenance. Currently, inmate labor is used to pick-up litter and other roadside debris.

Of note the NCCI Facility constructed a sand and salt shed in 2001.

#### 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)           | 100%          | DOC Staff only |
| Stormwater management committee established                             | Yes           |                |
| Stream teams established or supported                                   | No            |                |
| Shoreline clean-up participation or quantity of shoreline miles cleaned | NA            |                |
| Household Hazardous Waste Collection Days                               | NA            |                |
| ▪ days sponsored                                                        | No            |                |
| ▪ community participation                                               | N/A           |                |
| ▪ material collected                                                    | (tons or gal) |                |
| School curricula implemented                                            | NA            |                |
| Recycling efforts                                                       | 1600 tons     |                |
|                                                                         |               |                |

##### Legal/Regulatory

|                                                    |   | In Place<br>Prior to<br>Phase II | Under<br>Review | Drafted | Adopted |
|----------------------------------------------------|---|----------------------------------|-----------------|---------|---------|
| Regulatory Mechanism Status (indicate with "X")    |   |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination        |   |                                  |                 |         |         |
| ▪ Erosion & Sediment Control                       | X |                                  |                 |         |         |
| ▪ Post-Development Stormwater Management           |   |                                  |                 |         |         |
| Accompanying Regulation Status (indicate with "X") |   |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination        |   |                                  | X               |         | 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 |  | Six (6)  |  | One to stream and 5 to veg. swales |
| System-Wide mapping complete           |  | (100%)   |  |                                    |
| Mapping method(s)                      |  |          |  |                                    |
| ▪ Paper/Mylar                          |  | 100 %    |  |                                    |
| ▪ CADD                                 |  | 10%      |  |                                    |
| ▪ GIS                                  |  | 20 %     |  |                                    |
| 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. 4 |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets)      | NA             |                 |
| Total number of structures cleaned                                                             | 5              | 8               |
| Storm drain cleaned                                                                            | 2              | 4               |
| Qty. of screenings/debris removed from storm sewer infrastructure                              | (lbs. or tons) | 3 cy            |
| Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.) |                | X               |
| Cost of screenings disposal                                                                    | (\$)           | \$1800.00       |
|                                                                                                |                |                 |
|                                                                                                |                |                 |

|                                                                                      |                |  |
|--------------------------------------------------------------------------------------|----------------|--|
| 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 |    |
| Vacuum street sweepers specified in contracts | No                  | No |
|                                               |                     |    |
|                                               |                     |    |

|                                                                                        |    |    |
|----------------------------------------------------------------------------------------|----|----|
| Reduction in application on public land of: ("N/A" = never used; "100%" = elimination) |    |    |
| ▪ Fertilizers                                                                          | NA | NA |
| ▪ Herbicides                                                                           | NA | NA |
| ▪ Pesticides                                                                           | NA | NA |
|                                                                                        |    |    |
|                                                                                        |    |    |

|                                                          |                                                                                                    |     |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----|
| Anti-/De-Icing products and ratios                       | 10% NaCl<br>0% CaCl <sub>2</sub><br>0% MgCl <sub>2</sub><br>0% CMA<br>0% Kac<br>0% KCl<br>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                                                                                                | Yes |
| Storage shed(s) in design or under construction          | NA                                                                                                 | NA  |