

**Municipality/Organization:** VA Boston Healthcare System – West Roxbury

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**EPA NPDES Permit Number:**

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**MassDEP Transmittal Number:** W-041326

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**Annual Report Number  
& Reporting Period:**

**Year 10  
April 1, 2012 – March 31, 2013**

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## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2013)

### Part I. General Information

Contact Person: Bryan Soltysik

Title: GEMS Coordinator

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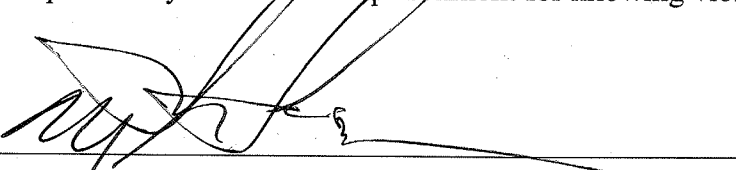
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Mailing Address: VA Boston Healthcare System, 1400 VFW Parkway, West Roxbury, MA  
02132

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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: 

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Printed Name: MICHAEL M LAWSON

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Title: DIRECTOR

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Date: 4/23/13

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## **Part II. Self-Assessment**

The VA Boston Healthcare System – West Roxbury has completed the required self-assessment and has determined that our facility is in compliance with all permit conditions.

**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 8 (Reliance on non-municipal partners indicated, if any)  | Planned Activities  |
|----------|------------------------------------|-------------------------------|---|---|---|
| 1.3.1    | Public Education Materials         | GEMS Coordinator              | Accumulate, develop, review, update information for the West Roxbury campus   | Reviewed and updated fact sheets, educational materials and medical center policies to include information about storm water.   | Update materials as needed.                                       |
| Revised  |                                    |                               |   |   |   |
| 1.3.2    | Training Programs                  | GEMS Coordinator              | Develop, review and conduct annual general awareness training for Engineering staff and New Employee Orientation. Educate contractors prior to construction activities. | Conducted annual refresher awareness training for Engineering Staff and conducted basic awareness training during New Employee Orientation. Contractors are educated during pre-construction meetings.                  | Continue to review, update and conduct trainings.                 |
| Revised  |                                    |                               |   |   |   |
| 1.3.3    | Storm Drain Identification Program | GEMS Coordinator/Engineering  | Develop, implement and maintain storm drain identification  | As part of our annual Earth Day celebration, employees were educated on storm water and assisted in stenciling storm drains with blue fish. Additionally, the existing storm drain campus map was reviewed and updated. | Continue to review storm drain locations and update as necessary. |
| 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 8<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities   |
|------------------|--|-------------------------------|--------------------------------------|---|--|
| 2.3.1<br>Revised | Annual Environmental Awareness Program                                     | GEMS Coordinator              | Volunteers to help keep campus clean | Various volunteers and public service organizations donate time to clean grounds              | Various volunteers and public service organizations donate time to clean grounds |
| 2.3.2<br>Revised | Partner w/City of Boston, City of Dedham, and/or local neighborhood groups | GEMS Coordinator/Engineering  | Form Partnerships                    | Continued member of Charles River Watershed Association                                       | Continue Partnerships  |
| 2.3.2<br>Revised | Suggestion Box   | GEMS Coordinator              | Implement suggestion program         | Suggestions for program enhancement can be submitted via GEMS “Green Box” on SharePoint site. | Continue suggestion feedback program.  |
| 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 8<br>(Reliance on non-municipal partners indicated, if any)    | Planned Activities   |
|------------------|---|-------------------------------|--|--|--|
| 3.4.1<br>Revised | Storm Drain Map                                   | GEMS Coordinator/Engineering  | Update campus storm drain map  | Map was reviewed and updated as necessary.   | Review and update storm drain map as necessary.  |
| 3.4.2<br>Revised | VA Storm Water Policy for the West Roxbury Campus | GEMS Coordinator              | Review storm water policy and management practices within other Medical Center policies. | Reviewed storm water policy and storm water management practices within Medical Center policies. | Continue to review storm water policy and management practices within other Medical Center policies. |
| 3.4.3<br>Revised | Illicit discharge detection program               | GEMS Coordinator/Engineering  | Review campus storm water map and scope of projects for illicit discharge connections.   | No illicit discharge connections were discovered.  | Continue to review campus storm water map and scope of projects for illicit discharge connections.   |
| 3.4.4<br>Revised | Illicit discharge elimination program             | GEMS Coordinator/Engineering  | Enforce storm water policy to correct detected illicit discharges.                       | No illicit discharges were detected.   | Continue to enforce storm water policy to correct detected illicit discharges.                       |

### 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 8 (Reliance on non-municipal partners indicated, if any)                 | Planned Activities   |
|------------------|---|-----------------------------------|--|--|--|
| 4.2.1<br>Revised | Regulatory Controls                             | GEMS Coordinator/Project Engineer | Review contractual language and enhance if necessary                                       | Reviewed all project contracts for storm water management practices and made recommendations as necessary. | Continue to review all project contract language and enhance as necessary.                     |
| 4.2.2<br>Revised | Review and conduct site inspections             | GEMS Coordinator/Project Engineer | Conduct routine onsite inspections of construction sites.                                  | Conducted routine inspections of construction projects.  | Continue to conduct routine onsite inspections of construction sites.                          |
| 4.2.3<br>Revised | Enforcement procedures                          | GEMS Coordinator/Project Engineer | Provide feedback to Project Engineer and Contracting Officer for any noncompliance issues. | No significant noncompliance issues reported.  | Continue to provide feedback on compliance status of projects.                                 |
| 4.2.4<br>Revised | Procedures to record and address public comment | GEMS Coordinator                  | Maintain record of comments received and actions taken to address public concerns.         | No public concerns were noted.   | Continue to maintain record of comments received and actions taken to address public concerns. |

#### 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 8 (Reliance on non-municipal partners indicated, if any)   | Planned Activities   |
|------------------|---------------------------------|--|--|--|--|
| 5.3.1<br>Revised | Structural storm water controls | GEMS Coordinator/<br>Project Engineers | Conduct post construction inspections of all projects  | All projects have had post construction inspections  | Conduct post construction inspections of all projects  |
| 5.3.2<br>Revised | Storm water policy              | GEMS Coordinator/<br>Engineering       | Review storm water policy as it relates to Engineering Maintenance and Construction activities | Reviewed existing Engineering & Maintenance policies and incorporated storm water management practices where applicable. Storm water management practices were written into construction documentation where applicable. | Continue to review storm water policy as it relates to Engineering Maintenance and Construction activities |
| 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 8<br>(Reliance on non-municipal partners indicated, if any)                                     | Planned Activities   |
|------------------|------------------------------|-------------------------------|--|---|--|
| 6.3.1<br>Revised | Employee training program    | GEMS Coordinator              | Update list of all relevant employee training programs           | Reviewed and updated list of all employee training programs including New Employee Orientation, Engineering, EMS, GEMS and Safety | Continue to review and update employee training programs.        |
| 6.3.2<br>Revised | Catch basin cleaning program | Engineering                   | Schedule annual catch basin cleaning and monitor volume removed. | Catch basins were cleaned in (month) and approximately 5 tons of material was removed.  | Schedule annual catch basin cleaning and monitor volume removed. |
| 6.3.3<br>Revised | Street sweeping program      | Engineering                   | Coordinator campus street sweeping with Engineering Service      | Campus street sweeping was conducted in the spring and fall.  | Coordinator campus street sweeping with Engineering Service      |
| Revised          |                              |                               |  |   |  |
| 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 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities   |
|------------------|---|-------------------------------|--|--|--|
| 7.2.1<br>Revised | Storm water Discharge Testing Program       | GEMS Coordinator/Engineering  | Review TMDL's for Charles River and conduct sampling if required.                                    | No sampling was conducted  | Review TMDL's for Charles River and conduct sampling if required.  |
| 7.2.2<br>Revised | Existing BMP Performance Evaluation Program | GEMS Coordinator/Engineering  | Evaluate existing BMP's and identify additional BMP's if necessary.                                  | Evaluated existing BMP's, no changes or additions.   | Evaluate existing BMP's and identify additional BMP's if necessary |
| 7.3.3<br>Revised | Monitoring Regulatory Developments          | GEMS Coordinator              | Assess regulatory obligations at least 60 days prior to May 1 <sup>st</sup> Annual Report submission | Assessed regulatory requirements with EPA and MADEP  | Continue annual regulatory obligation assessment                   |

7a. Additions

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|--|--|--|--|--|--|
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7b. WLA Assessment  
n/a

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

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2012 through March 31, 2013)

**Programmatic**

|   | (Preferred Units) | Response     |
|---|-------------------|--------------|
| Stormwater management position created/staffed                | (y/n)             | No           |
| Annual program budget/expenditures **                         | (\$)              | 3,000        |
| Total program expenditures since beginning of permit coverage | (\$)              | 24,000 (est) |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc) |                   | General      |

**Education, Involvement, and Training**

|  |                                  |             |
|--|----------------------------------|-------------|
| Estimated number of property owners reached by education program(s)  | (# or %)                         | 1           |
| Stormwater management committee established  | (y/n)                            | No          |
| Stream teams established or supported  | (# or y/n)                       | no          |
| Shoreline clean-up participation or quantity of shoreline miles cleaned **   | (y/n or mi.)                     | No          |
| Shoreline cleaned since beginning of permit coverage   | (mi.)                            | no          |
| Household Hazardous Waste Collection Days  |                                  |             |
| <ul style="list-style-type: none"> <li>▪ days sponsored **</li> <li>▪ community participation **</li> <li>▪ material collected **</li> </ul> | (#)<br>(# or %)<br>(tons or gal) | 0<br>0<br>0 |
| School curricula implemented   | (y/n)                            | no          |

**Legal/Regulatory**

| Regulatory Mechanism Status (indicate with "X")    | In Place Prior to Phase II | Reviewing Existing Authorities | Drafted | Draft in Review | Adopted |
|--|----------------------------|--------------------------------|---------|-----------------|---------|
| ▪ Illicit Discharge Detection & Elimination        |                            |                                |         |                 | X       |
| ▪ Erosion & Sediment Control                       |                            |                                |         |                 | X       |
| ▪ Post-Development Stormwater Management           |                            |                                |         |                 | X       |
| Accompanying Regulation Status (indicate with "X") |                            |                                |         |                 |         |
| ▪ Illicit Discharge Detection & Elimination        |                            |                                |         |                 | X       |
| ▪ Erosion & Sediment Control                       |                            |                                |         |                 | X       |
| ▪ Post-Development Stormwater Management           |                            |                                |         |                 | X       |

**Mapping and Illicit Discharges**

|  | (Preferred Units)   | Response  |
|--|---------------------|-----------|
| Outfall mapping complete   | (%)                 | 100%      |
| Estimated or actual number of outfalls                             | (#)                 | 2         |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%)                 | 90%       |
| Mapping method(s)  |                     |           |
| ▪ Paper/Mylar  | (%)                 | 100%      |
| ▪ CADD   | (%)                 | 90%       |
| ▪ GIS  | (%)                 | 0         |
| Outfalls inspected/screened **                                     | (# or %)            | 50%       |
| Outfalls inspected/screened (Since beginning of permit coverage)   | (# or %)            | 50% (est) |
| Illicit discharges identified **                                   | (#)                 | 0         |
| Illicit discharges identified (Since beginning of permit coverage) | (#)                 | 0         |
| Illicit connections removed **                                     | (#); and (est. gpd) | 0         |
| Illicit connections removed (Since beginning of permit coverage)   | (#); and (est. gpd) | 0         |
| % of population on sewer   | (%)                 | 100%      |
| % of population on septic systems                                  | (%)                 | 0         |

**Construction**

|  | (Preferred Units) | Response |
|--|-------------------|----------|
| Number of construction starts (>1-acre) **   | (#)               | 0        |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control ** | (%)               | 100%     |
| Site inspections completed **  | (# or %)          | 100%     |
| Tickets/Stop work orders issued **   | (# or %)          | 0        |
| Fines collected **   | (# and \$)        | 0        |
| Complaints/concerns received from public **  | (#)               | 0        |
|  |                   |          |
|  |                   |          |

**Post-Development Stormwater Management**

|  |          |      |
|--|----------|------|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%)      | 100% |
| Site inspections (for proper BMP installation & operation) completed **  | (# or %) | 100% |
| BMP maintenance required through covenants, escrow, deed restrictions, etc.  | (y/n)    | no   |
| Low-impact development (LID) practices permitted and encouraged  | (y/n)    | no   |
|  |          |      |
|  |          |      |

**Operations and Maintenance**

|  |                |              |
|--|----------------|--------------|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **           | (times/yr)     | Once/year    |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) ** | (times/yr)     | 0            |
| Qty of structures cleaned **   | (#)            | 10           |
| Qty. of storm drain cleaned **   | (%, LF or mi.) | 10           |
| Qty. of screenings/debris removed from storm sewer infrastructure **                         | (lbs. or tons) | 5 tons (est) |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **             | (location)     | landfill     |

| Basin Cleaning Costs                              |                         |  |              |
|---|-------------------------|--|--------------|
| • Annual budget/expenditure (labor & equipment)** | (\$)                    |  | 3,000        |
| • Hourly or per basin contract rate **            | (\$/hr or \$ per basin) |  | n/a          |
| • Disposal cost**                                 | (\$)                    |  | 2,500        |
| Cleaning Equipment                                |                         |  |              |
| • Clam shell truck(s) owned/leased                | (#)                     |  |              |
| • Vacuum truck(s) owned/leased                    | (#)                     |  | 1/contractor |
| • Vacuum trucks specified in contracts            | (y/n)                   |  |              |
| • % Structures cleaned with clam shells **        | (%)                     |  |              |
| • % Structures cleaned with vacator **            | (%)                     |  | 100          |

|   | (Preferred Units)  | Response    |
|---|--------------------|-------------|
| Average frequency of street sweeping (non-commercial/non-arterial streets) **           | (times/yr)         | Twice/yr    |
| Average frequency of street sweeping (commercial/arterial or other critical streets) ** | (times/yr)         | 0           |
| Qty. of sand/debris collected by sweeping **  | (lbs. or tons)     | 1 ton (est) |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **                | (location)         | compost     |
| Annual Sweeping Costs   |                    |             |
| • Annual budget/expenditure (labor & equipment)**                                       | (\$)               | 500         |
| • Hourly or lane mile contract rate **  | (\$/hr. or ln mi.) |             |
| • Disposal cost**   | (\$)               |             |
| Sweeping Equipment  |                    |             |
| • Rotary brush street sweepers owned/leased   | (#)                | 1           |
| • Vacuum street sweepers owned/leased   | (#)                | 0           |
| • Vacuum street sweepers specified in contracts   | (y/n)              | No          |
| • % Roads swept with rotary brush sweepers **   | %                  | 100%        |
| • % Roads swept with vacuum sweepers **   | %                  | 0           |

Reduction (since beginning of permit coverage) in application on public land of:  
 ("N/A" = never used; "100%" = elimination)

|  |             |    |
|--|-------------|----|
| ▪ Fertilizers  | (lbs. or %) | 0  |
| ▪ Herbicides   | (lbs. or %) | 0  |
| ▪ Pesticides   | (lbs. or %) | 0  |
| Integrated Pest Management (IPM) Practices Implemented | (y/n)       | no |

|   | (Preferred Units)  | Response                        |
|---|--|---------------------------------|
| Average Ratio of Anti-/De-Icing products used **  | %Potassium   | Not available from manufacturer |
| (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)<br>Product: Inferno Ice Melt | Acetate<br>% Urea<br>% Pure<br>Solar<br>Sodium<br>% CMA<br>% Sodium<br>Silicate<br>% Ethanol<br>Amines |                                 |
| Pre-wetting techniques utilized **  | (y/n or %)   | no                              |
| Manual control spreaders used **  | (y/n or %)   | yes                             |
| Zero-velocity spreaders used **   | (y/n or %)   | no                              |
| Estimated net reduction or increase in typical year salt/chemical application rate  | (±lbs/ln mi. or %)   | +300 % (est)                    |
| Estimated net reduction or increase in typical year sand application rate **  | (±lbs/ln mi. or %)   | +300% (est)                     |
| % of salt/chemical pile(s) covered in storage shed(s)   | (%)  | 100%                            |
| Storage shed(s) in design or under construction   | (y/n or #)   | 0                               |
| 100% of salt/chemical pile(s) covered in storage shed(s) by May 2008  | (y/n)  | yes                             |
|   |  |                                 |
|   |  |                                 |

## Water Supply Protection

|   |          |   |
|---|----------|---|
| Storm water outfalls to public water supplies eliminated or relocated                             | # or y/n | 0 |
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n | 0 |
| Treatment units induce infiltration within 500-feet of a wellhead protection area                 | # or y/n | 0 |