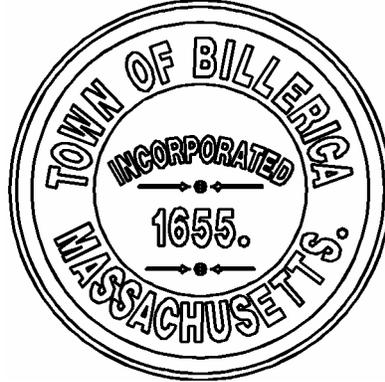


Town of Billerica



NPDES PII Small MS4 General Permit Annual Report (MA041182) (W-040980)

YEAR 4

Prepared by:
**The Town of Billerica
Department of Public Works
Engineering Division
365 Boston Road
Billerica, Massachusetts 01821**

Municipality/Organization: Town of Billerica

EPA NPDES Permit Number: MA041182

Mass DEP Transmittal Number: W-040980

Annual Report Number

& Reporting Period: No. 4: April 1, 2006 – March 31, 2007

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2007)

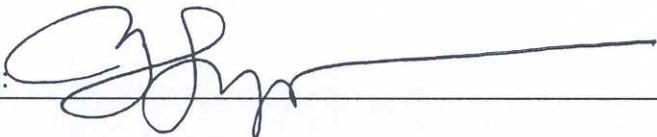
Part I. General Information

Contact Person: Kelley Conway **Title:** Town Engineer

Telephone #: 978-671-0955 **Email:** kconway@town.billerica.ma.us

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: Rocco Longo

Title: Town Manager

Date: April 26, 2007

Part II. Self-Assessment

The Town of Billerica has completed the required self-assessment and has determined that our municipality 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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|------------------|---------------------------------|-------------------------------|---|--|---|
| 1.3.1 Revised | Partner with local organization | Engineering | Partner with one organization each year. | Continued support with SuAsCo. Partnered with Central Massachusetts Mosquito Control Project. | Continue support and assist in the development of outreach material with SuAsCo. Revisit partnering with O.A.R. for employee training or other activities. |
| 1.3.2 Revised | Public Education Materials | BOH <i>BOH & DPW</i> | Stormwater brochure and booth at Health Fair Stormwater brochures available at Town offices and booth at Health Fair | A variety of brochures are available at various offices around town (Water Dept, Conservation, DPW, BOH). Provided informational handout regarding Billerica Compost program to residents. Stormwater info included in annual water report and distributed to all town residents and businesses. Received business brochure from SuAsCo. | Participate at Health Fair. Update stormwater display and pamphlets at various offices. Develop and distribute brochure as part of by-law development. |
| 1.3.3 Revised | Local schools education program | School Dept. | Present stormwater to two schools each year. | Spoke with representative from Department of Education. Gave them SuAsCo 5 th /6 th Grade curriculum package to review. | Implement classroom outreach to 5 th & 6 th grade classes using curriculum developed in BMP 1.3.1 This may not be feasible due to curriculum & schedules. |
| 1.3.4 Revised | Stormwater Web Page | Engineering | Develop stormwater web page | Stormwater web page in place. Updated web page and added additional links and information. Annual Report available for viewing | Continue to update web page and add additional links and information. |
| 1.3.5 Revised | Cable Access TV Show | BOH <i>Engineering</i> | Select a stormwater program for viewing on Billerica Access TV. | Obtained VHS copy of <i>After the Storm</i> from National Service Center for Environmental Publications and had it played on Billerica Access TV multiple times. | Review other available videos or resources for use on Billerica Access TV. |

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|-----------------|--|--------------------------------------|--|---|---|
| 1.3.6 | Public Access GIS Tool | Engineering | Provide public access to maps of streams, rivers, storm drains and water quality data by Year 5. | Hired GIS Analyst to coordinate the implementation of Web GIS for public use. | Provide public access to maps of streams, rivers, storm drains and water quality data by Year 5 (if sufficient funding is available). |
| Revised | | | | | |
| 1.4.1 | Stormwater flyer to residents | SuAsCo & DPW | No Goal(s) for Yr. 4 | N/A | N/A |
| Revised | | | | | |
| 1.4.2 | Stormwater lesson plan | SuAsCo & DPW | No Goal(s) for Yr. 4 | N/A | N/A |
| Revised | | | | | |
| 1.4.3 | Stormwater flyer to businesses | SuAsCo & DPW | Stormwater flyer to 50% of Town businesses | Year 3 product changed by SuAsCo Received Media Toolkit in April 2006. Hung “ <i>Stormwater Matters</i> ” banner at Town Hall. Information from Toolkit included in annual water report and distributed to town residents and businesses. | Present Stormwater Power Point Program to public. |
| Revised | <i>Media toolkit and stormwater PowerPoint program</i> | | <i>Media Packet to local Media</i> | | |
| 1.4.4 | Stormwater media campaign | SuAsCo & DPW | Media Packet to local Media | Year 4 product changed by SuAsCo Received Stormwater Business Flyer and Storm Drain Marking Kits in March 2007. | Print and distribute business flyer to local businesses. Implement storm drain marking program. |
| Revised | <i>Business Flyer & Storm Drain Marking</i> | | <i>Stormwater flyer to 50% of Town businesses</i> | | |
| 1.4.5 | Stormwater video | SuAsCo & DPW | No Goal(s) for Yr. 4 | N/A | Show stormwater video at public meeting and/or cable station if available from SuAsCo. |
| Revised | | | | | |

2. Public Involvement and Participation

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|------------------|--|-------------------------------|---|--|---|
| 2.3.1 Revised | Partner / Support a Watershed Organization | Engineering | Partner with one local organization each year. | Continued partnership with SuAsCo. | Continue partnership with SuAsCo. Revisit partnering with O.A.R. for employee training or other activities. |
| 2.3.2 Revised | Storm drain stenciling program | Engineering | Develop & Implement drain stenciling program | Looked at alternatives to stenciling. Received Drain Marking kits from SuAsCo. | Implement drain marking program. |
| 2.3.3 Revised | Stormwater Public Meetings Program | Engineering | Discuss stormwater at one or more public meeting each year | Stormwater issues discussed at meetings held on Michael Road and Cook Street/Alexander Road projects. | Continue to invite public discussion of stormwater at public meetings. |
| 2.3.4 Revised | Recognition Programs | DPW | Recognize one stormwater savvy business each year | Determined this was an unfeasible BMP due to lack of long term interest and funding. | Plan to meet intent of this BMP through 2.3.7 and 1.4.4 (stormwater business flyer) |
| 2.3.5 Revised | Recreation Department Public Education Program | Engineering | Involve Recreation Department in stormwater public education program each year. | Met with Recreation Director to discuss ways to include stormwater into recreation activities. Continued involvement in the Lampson Field renovations project. | Continue to involve recreational department and identify opportunities for public involvement. |

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|-----------------|--|--------------------------------------|---|--|--|
| 2.3.6 | Annual “Clean the Stream” program | Recreation | Recruit volunteers for each years’ stormwater cleaning effort | Held annual Town wide “Green-up” and Town wide “Clean-up” events. Contracted with the Commonwealth of Massachusetts Middlesex Sheriffs Office for assistance with cleaning and preparations of parks, playgrounds, and beach. Contracted with Central Massachusetts Mosquito Control Project to clean 6,845’ of streams. | Continue annual Town wide “Green-up” and Town wide “Clean-up” events. Continue affiliations with Central Massachusetts Mosquito Control Project. |
| Revised | | | | | |
| 2.3.7 | Develop Stormwater By-Law Advisory Group | Stormwater By-Law Working Group | Hold 1 or more meetings with Advisory Group | The Working Group identified a diverse group of local stakeholders to participate in development of the new Stormwater By-law. | Invite local stakeholders and businesses to 1 or more meetings to provide input on the Draft & Final Stormwater Management By-law. |
| Revised | | | | | |
| 2.4.1 | Stormwater traveling display | SuAsCo & DPW | No Goal(s) for Yr. 4 | Maintained stormwater display and pamphlets at Town Hall. | N/A |
| Revised | | | | | |
| 2.4.2 | Stormwater poster contest | SuAsCo & DPW | Poster contest winners selected | N/A | N/A |
| Revised | <i>Year 3 product eliminated by SuAsCo</i> | | | | |
| 2.4.3 | Stormwater photo contest | SuAsCo & DPW | Photo contest advertised | N/A | N/A |
| Revised | <i>Year 3 product eliminated by SuAsCo</i> | | | | |
| 2.4.4 | Stormwater summit special event | SuAsCo & DPW | Promote stormwater summit | Reviewed “Stormwater Matters” PowerPoint and Media Toolkit. | Plan to hold stormwater public hearing as part of by-law adoption process. |
| Revised | | | | | |
| 2.4.5 | Stormwater super summit | SuAsCo & DPW | No Goal(s) for Yr. 4 | N/A | Host or attend watershed wide super summit if coordinated by SuAsCo. |
| Revised | | | <i>Host or attend watershed wide super summit</i> | | |

3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|------------------|---|-------------------------------|---|---|--|
| 3.4.1 Revised | Asset Management Program | Engineering | Develop stormwater Asset Management program. | The Asset Management Implementation Plan for all of Billerica’s infrastructure was completed in March 2005. Reviewed stormwater portion of the plan. Funding not available to implement Year 1 actions. | Pursue funding to incorporate Year 1 tasks (Develop stormwater infrastructure inspection program; Develop complaint tracking system) into capital improvement planning. There are no additional Actions planned for Year 2 of the Asset Management Plan. |
| 3.4.2 Revised | Storm Drain Map | Engineering | GPS field effort of drainage structures. | Continue to verify accuracy and completeness of consultant’s drain map. Efforts not complete. Hired GIS Analyst to continue with this effort. | Pursue funding to continue efforts. |
| 3.4.3 Revised | TMDL, Critical Habitat, Historic Property | Engineering | Monitor changes in TMDL, Critical Habitat & Historic Site | Continued to monitor changes in TMDL, critical habitats, and historic sites. | Continue to monitor changes in TMDL, critical habitats, and historic sites. Create a plan to meet load allocations in the <i>Final TMDLs of Bacteria for Shawsheen River Basin</i> report. (Also see 7.2.1) |
| 3.4.4 Revised | Stormwater By-Law | Board of Health | Develop stormwater requirements regulated by Board of Health | Continued working with consultant and Working Group to develop stormwater by-law and changes to Board of Health Regulations. | Submit By-law to Town Meeting for adoption and Implement. |
| 3.4.5 Revised | Illicit Discharge Detection Program | DPW | Develop phased illicit discharge detection program. | Pursued funding and worked with Woodard & Curran to develop and implement illicit discharge detection program. | Continue program to find illicit discharges. |
| 3.4.6 Revised | Illicit Discharge Elimination Program | DPW | Enforce stormwater regulations to correct detected illicit discharges <i>Enforce illicit discharges by-law</i> | By-law not adopted yet (BMP 3.4.4). Drafted procedure for identifying illicit discharges. | Enforce stormwater regulations to correct detected illicit discharges |

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|-----------------|----------------------------|--------------------------------------|---|--|---|
| 3.4.7 | Resident education program | DPW | Develop and distribute fliers defining illicit discharges and summarizing the Town Stormwater Regulations | N/A. Dependent on progress of 3.4.5. | Public education for adoption of stormwater by-law to incorporate information regarding illicit discharges. |
| Revised | | | | | |

4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|------------------|---|--------------------------------------|---|--|--|
| 4.2.1 Revised | Regulatory Controls | Board of Health | Develop “Erosion & Sediment Control” by-law | Erosion and sediment control has been incorporated into the draft Stormwater Management By-law. | Review and finalize erosion & sediment control regulations. Present stormwater by-law for adoption at fall town meeting. |
| 4.2.2 Revised | Review and site inspection procedures | Board of Health | Sanctions developed and included in regulations to ensure compliance | Included review and site inspection procedures in the draft Stormwater Management By-law. | Review and finalize guidelines. Present stormwater by-law for adoption at fall town meeting. |
| 4.2.3 Revised | Enforcement procedures | Board of Health | Develop and implement enforcement procedures and sanctions for stormwater violators | Enforcement procedures and sanctions for stormwater violators are part of the draft Stormwater Management By-law. | Review and finalize guidelines. Present stormwater by-law for adoption at fall town meeting. |
| 4.2.4 Revised | Procedures for Handling Public Comments | Board of Health | Develop & implement public comment procedure | Complaints & comments taken online or through complaint tracking form when received by phone call or over the counter. | Continue development of procedures for receipt and consideration of information submitted by public. |

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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|------------------|--|--|---|---|---|
| 5.3.1 Revised | Structural stormwater controls | Planning Board | Revise subdivision rules and regulations with new BMP's | N/A. Completed Year 2. | N/A |
| 5.3.2 Revised | Zoning Requirements <i>Local By-Laws</i> | Zoning Board <i>Stormwater By-Law Working Group</i> | Evaluate Zoning By-laws <i>Develop General By-Law</i> | Reviewed all local regulations to determine where improvements might be made. Developed draft Stormwater Management By-law. | Review and finalize guidelines. Present stormwater by-law for adoption at fall town meeting. |
| 5.3.3 Revised | Planning Strategies | Engineering | Review Current Town Master Plan | Continued review of the current Master Plan as it pertains to stormwater. | Continue review of the current Master Plan as it pertains to stormwater. |
| 5.3.4 Revised | Conditions for private stormwater systems | Engineering | Develop maintenance requirements for private stormwater systems | Maintenance requirements for private stormwater systems have been incorporated into the Stormwater Management By-law. | Present stormwater by-law for adoption at fall town meeting. |
| 5.3.5 Revised | Stormwater infrastructure inspection program | Engineering | Develop technology based inspection program | Since AM Program BMP (3.4.1) is not funded, technology based inspection program has been postponed. Provisions for ongoing inspection of private BMP's is addressed in the draft stormwater by-law. | Pursue funding for the development of a technology based inspection program. Present stormwater by-law for adoption at fall town meeting. |

BOH

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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|------------------|-------------------------------|-------------------------------|---|--|--|
| 6.3.1 Revised | Pollution Prevention Planning | Highway Dept. | Develop a Stormwater Pollution Prevention Plan | Funding not available. | In coordination with Woodard & Curran, develop a Stormwater Pollution Prevention Plan. |
| 6.3.2 Revised | Employee Training Program | DPW | Implement employee training program | Participated in US EPA Stormwater Webcast: ‘Financing a Municipal Stormwater Program’. Discussed stormwater program with highway superintendent. | Finalize development of a training program and training tracking system for department employees. Implement employee training. |
| 6.3.3 Revised | Recycling Program | Highway Dept. | Monitor recycling program & enhance if necessary | Annual hazardous waste day and continuously operated oil recycling program available on monthly basis. Investigated DEP grant for rain barrels. | Monitor and enhance recycling program. |
| 6.3.4 Revised | Catch Basin Cleaning Program | Highway Dept. | Use asset management tool to monitor pounds of sediment removed from Town catch basins <i>Clean catch basins each year and monitor pounds of sediment removed.</i> | Funding not available for AM tool. Continuous catch basin cleaning by Highway Department. Removed 136 tons of debris. | Clean catch basins and monitor pounds of sediment removed. |
| 6.3.5 Revised | Street Sweeping Program | Highway Dept. | Use asset management tool to monitor pounds of sediment removed during street sweeping <i>Sweep Streets each year and monitor pounds of sediment removed.</i> | Funding not available for AM tool. Street sweeping across 500 lane miles by Highway Dept. | Sweep streets each year and monitor pounds of sediment removed. |

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|-----------------|----------------------------|--------------------------------------|---|--|--|
| 6.3.6 | Operations and Maintenance | DPW | Inventory ongoing stormwater maintenance activities | Looking into new location for Highway Department. Inventory ongoing stormwater maintenance activities. | Develop measures to reduce sources of pollutant runoff and continue to inventory ongoing stormwater maintenance activities. Address this in SWPPP (BMP 6.3.1). |
| Revised | | | | | |
| 6.3.7 | Reporting | DPW | Continue to track stormwater management activities and submit annual report | Continued to track stormwater management activities and submitted annual report. | Continue to track stormwater management activities and submit annual report. |
| Revised | | | | | |

6a. Additions

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|-----------------|--|--------------------------------------|--|--|---|
| 6.3.8 | Mosquito Control Project & Drainage System Maintenance | Engineering | Record of improved drainage system inspection and maintenance. | Through the efforts of the Central Massachusetts Mosquito Control Project, brush and other accumulated debris was removed from culverts and streams. | Continue with Mosquito Control Program. |
| Revised | | | | | |

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 4 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|-----------------|----------------------------------|--------------------------------------|--|--|--|
| 7.2.1 | Monitor Current Impairment Lists | DPW | Continue to monitor TMDL studies annually and develop programs as appropriate. | Continued to monitor TMDL studies. | Continue to monitor TMDL studies annually and develop programs as appropriate. Create a plan to meet load allocations in the <i>Final TMDLs of Bacteria for Shawsheen River Basin</i> report. (Also see 7.2.1) |
| Revised | | | | | |

7b. WLA Assessment

N/A

Part IV. Summary of Information Collected and Analyzed

N/A

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, 2006 through March 31, 2007)

Programmatic

| | | Response |
|---|-------------------|----------------------------|
| Stormwater management position created/staffed | (y/n) | Yes |
| Annual program budget/expenditures ** | (Preferred) Units | \$ 122,726 |
| Total program expenditures since beginning of permit coverage | (\$) | \$ 695,656 |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc) | | Town Meeting Appropriation |

Education, Involvement, and Training

| | | |
|--|---------------|---------------|
| Estimated number of property owners reached by education program(s) | (# or %) | 100% |
| Stormwater management committee established | (y/n) | Yes |
| Stream teams established or supported | (# or y/n) | Yes |
| Shoreline clean-up participation or quantity of shoreline miles cleaned ** | (y/n or mi.) | 1.3 mi |
| Shoreline cleaned since beginning of permit coverage | (mi.) | >3.1 mi |
| Household Hazardous Waste Collection Days | | |
| ▪ days sponsored ** | (#) | 12 |
| ▪ community participation ** | (# or %) | 455 |
| ▪ material collected ** | (tons or gal) | 1820 gal |
| Oil | | 13 containers |
| Flammables | | 3 containers |
| Oxidizers | | 4 containers |
| Pesticides | | 3 containers |
| Corrosives | | 11 containers |
| Other | | 1 container |
| Mercury | | |
| School curricula implemented | (y/n) | Partial |

Legal/Regulatory

| | In Place Prior to Phase II | Reviewing Existing Authorities | Drafted | Draft Review | Adopted |
|--|----------------------------------|--------------------------------------|---------|--------------|---------|
| Regulatory Mechanism Status (indicate with "X") | | | | | |
| ▪ 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

| | | Response |
|--|------------------------|-------------|
| Outfall mapping complete | (%) | 100 |
| Estimated or actual number of outfalls | (Preferred Units) | 467 |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%) | 100 |
| Mapping method(s) | | |
| ▪ Paper/Mylar | (%) | |
| ▪ CADD | (%) | |
| ▪ GIS (Note: 86% of structured located with GPS. 14% converted to GIS from existing maps.) | (%) | 100 |
| Outfalls inspected/screened ** | (# or %) | 0 |
| Outfalls inspected/screened (Since beginning of permit coverage) | (# or %) | 60 |
| Illicit discharges identified ** | (#) | 0 |
| Illicit discharges identified (Since beginning of permit coverage) | (#) | 4 potential |
| Illicit connections removed ** | (#); and (est. gpd) | 0 |
| Illicit connections removed (Since beginning of permit coverage) | (#); and (est. gpd) | 0 |
| % of population on sewer | (%) | 72 |
| % of population on septic systems | (%) | 28 |

Construction

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

Post-Development Stormwater Management

| | | |
|--|----------|--|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%) | |
| Site inspections (for proper BMP installation & operation) completed ** | (# or %) | |
| BMP maintenance required through covenants, escrow, deed restrictions, etc. | (y/n) | |
| Low-impact development (LID) practices permitted and encouraged | (y/n) | |
| | | |
| | | |

Operations and Maintenance

| | | |
|--|----------------|----------|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets) ** | (times/yr) | 1 |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) ** | (times/yr) | 1 |
| Qty of structures cleaned ** | (#) | 1,288 |
| Qty. of storm drain cleaned ** | (%, LF or mi.) | |
| Qty. of screenings/debris removed from storm sewer infrastructure ** | (lbs. or tons) | 136 ton |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | Landfill |

| | | |
|---|-------------------------|------------------------|
| Basin Cleaning Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | 35,000 |
| • Hourly or per basin contract rate ** | (\$/hr or \$ per basin) | \$24.82 per basin |
| • Disposal cost** | (\$) | Included in above cost |
| Cleaning Equipment | | |
| • Clam shell truck(s) owned/leased | (#) | 2 |
| • Vacuum truck(s) owned/leased | (#) | 0 |
| • Vacuum trucks specified in contracts | (y/n) | No |
| • % Structures cleaned with clam shells ** | (%) | 100 |
| • % Structures cleaned with vactor ** | (%) | 0 |

Response

| | | |
|---|----------------------------|----------------|
| Average frequency of street sweeping (non-commercial/non-arterial streets) ** | (times/yr) | 1 |
| Average frequency of street sweeping (commercial/arterial or other critical streets) ** | (times/yr) (Preferred 1-2) | 1-2 |
| Qty. of sand/debris collected by sweeping ** | (lbs. or tons) | Not available |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | Landfill (BFI) |
| Annual Sweeping Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | |
| • Hourly or lane mile contract rate ** | (\$/hr. or ln mi.) | n/a |
| • Disposal cost** | (\$) | n/a |
| Sweeping Equipment | | |
| • Rotary brush street sweepers owned/leased | (#) | 2 |
| • 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 %) | |
| ▪ Herbicides | (lbs. or %) | |
| ▪ Pesticides | (lbs. or %) | |
| Integrated Pest Management (IPM) Practices Implemented | (y/n) | |
| | | |

| | | Response |
|--|--------------------------------|---------------|
| Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | (Preferred Units) | |
| | % NaCl | 99.5% |
| | % CaCl ₂ | 0 |
| | % MgCl ₂ | 0 |
| | % CMA | 0 |
| | % Kac | 0 |
| | % KCl | 0 |
| % Sand | 0.5% | |
| Pre-wetting techniques utilized ** | (y/n or %) | No |
| Manual control spreaders used ** | (y/n or %) | No |
| Zero-velocity spreaders used ** | (y/n or %) | Yes |
| Estimated net reduction or increase in typical year salt/chemical application rate | (±lbs/l _n mi. or %) | n/a |
| Estimated net reduction or increase in typical year sand application rate ** | (±lbs/l _n mi. or %) | n/a |
| % of salt/chemical pile(s) covered in storage shed(s) | (%) | 100 |
| Storage shed(s) in design or under construction | (y/n or #) | No (In place) |
| 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 | No |
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n | No |
| <ul style="list-style-type: none">• Treatment units induce infiltration within 500-feet of a wellhead protection area | # or y/n | No |