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May 29, 2008

Ms. Ann Herrick - CIP
U.S. Environmental Protection Agency - Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Subject: NPDES Phase II Small MS4 General Permit (MA041062)
Annual Report
Stoneham, Massachusetts

Dear Ms. Herrick:

In accordance with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), enclosed is the 2007 Annual Report summarizing the status of Stoneham's Stormwater Management Program. As required by the NPDES General Permit, a copy of this report has also been submitted to the Massachusetts Department of Environmental Protection, the co-permitting authority for the state of Massachusetts.

Please do not hesitate to contact me with any questions or comments regarding this submission.

Very truly yours,

FAY, SPOFFORD & THORNDIKE, LLC.
By

Deborah L. Duhamel, P.E.
Principal Engineer

Enclosures: NPDES PII Small MS4 General Permit Annual Report

Cc: Robert E. Grover (for municipal dist.)
Director of Public Works
Stoneham, MA

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Municipality/Organization: **Stoneham, Massachusetts**

EPA NPDES Permit Number: **MA041062**

MassDEP Transmittal Number: **W-040960**

Annual Report Number & Reporting Period: **April 1, 2007 – March 31, 2008**

P 6/5/08

NPDES PII Small MS4 General Permit Annual Report
(Due: May 1, 2008)

Part I. General Information

Contact Person: Robert E. Grover, P.E. Title: Director, Dept. of Public Works

Telephone #: 781-438-0760 Email: rgrover@ci.stoneham.ma.us

Mailing Address: 16 Pine Street, Stoneham, MA 02180

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: Robert E. Grover

Title: Director, Department of Public Works

Date:

Part II. Self-Assessment

The Town of Stoneham 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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1-1	Place Educational Information on the Town's Website	Department of Public Works	**Winter '03/04 –Winter '08/09** • Post stormwater related information on the Town's website. • Update website regularly.	Stormwater related information was posted on the Town's website.	Stormwater related information will continue be posted on the website.
1-2	Conduct Household Hazardous Waste Collection Days	Department of Public Works	**Fall '03/'04/'05/'06/'07/'08** • Continue to sponsor one household hazardous waste collection day per year. • Annually send a press release advertising the event to the *Stoneham Independent* and *Stoneham Sun* and track whether it was published. • Advertise the event on the Town's public cable access channel. • Advertise the event on the Town's website. • Track the amounts and types of waste collected each year. • Track the number of Stoneham vehicles/residents that participate in each event.	A Household Hazardous Waste Collection Day was not held in 2007. However, the Town provided information to residents on the Minuteman Hazardous Products Facility in Lexington that is available to Stoneham residents for household hazardous waste disposal.	A Household Hazardous Waste Collection Day for 2008 has been requested as part of the 2008 budget. If approved, the event will be advertised in the *Stoneham Independent* and *Stoneham Sun*, as well as on the Town's website and public cable access channel.
1-3	Intensify the Existing Pet Waste Management Campaign	Board of Health Animal Control Officer	**Spring '04/'05/'06/'07/'08** • Track the number of brochures distributed annually. • Track the number of violations issued annually. • Develop an informational press release on pet waste management for the *Stoneham Independent* and *Stoneham Sun* and track whether it was published.	The brochure was not distributed during Permit Year 5. However, the DPW has worked closely with the Board of Health to address pet waste management issues in troubled areas. In addition, pet waste signs were posted at troublesome areas.	The DPW will continue to work closely with the Board of Health to address pet waste management issues in troubled areas.
1-4	Place Educational Information on Stoneham Community Access Television	Department of Public Works Stoneham Community Access Television	**Fall '04 –Winter '08/09** • Obtain "Oil Leak" and "Fertilizer" PSAs from the Washington State Department of Ecology Water Quality Consortium. • Track how frequently the PSAs are broadcast on Stoneham Community Access Television.	SCATV broadcasted stormwater related PSAs, during Permit Year 5.	SCATV will continue to broadcast the PSA's during Permit Year 6.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1-5	Promote Water Conservation Practices for Homeowners	Department of Public Works	**Spring '03 –Winter '08/09** • Post water conservation posters at Town Hall and the public library. • Include water conservation bill inserts with the water bill. • Issue an annual press release to the *Stoneham Independent* and *Stoneham Sun* to promote water conservation.	Posters were hung in the Town Hall and public libraries. Educational materials were available at the DPW office, library, and Town Hall. Water conservation bill inserts were included in the water bill. Mailings were made to new residents and residents with questions.	The DPW will continue posting water conservation posters at Town Hall and public libraries and including water conservation bill inserts with the water bill. Educational materials will continue to be available at the DPW office, library, and Town Hall. Dye tablets and water-efficiency kits are available to residents.
1-6	Develop a Press Release and Flyer Targeting Community Businesses	Department of Public Works	**Fall '05/'07** • Issue the press release to the *Stoneham Independent* and *Stoneham Sun* and track whether it was published. • Submit copies of the informational flyers to the Stoneham Chamber of Commerce (SCC). • Post the informational flyer on the Town's website.	The press release was published in the *Stoneham Independent* and *Stoneham Sun.*	The press release will be published in the *Stoneham Independent* and *Stoneham Sun.* The press release will also be converted to a flyer that will be posted on the Town's website and will be given to the SCC.

1a. Additions

1-7	Develop a Stormwater Brochure for General Public	Department of Public Works	**Summer '05 – Winter '08/09** • Develop and issue a brochure educating the public on ways to prevent pollution in stormwater runoff.	The DPW made the EPA brochure "After the Storm – A Citizen's Guide to Understanding Stormwater" available to the public at the DPW and the Town library.	The DPW will continue to make this brochure available to the public at the DPW and the Town library.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2-1	Public Access to SWMP and Receipt of Comments	Department of Public Works Library Director	**Fall '03 –Winter '08/09** • Make draft SWMP available to the public for the review and comment period. • Finalize SWMP. • Make the final SWMP accessible to the public at the public library and Town's website.	The draft of the Storm Water Management Program is available at the DPW, the library, and the Town Clerk's office.	The draft of the Storm Water Management Program will continue to be available at the DPW, the library, and the Town Clerk's office.
2-2	Public Access to Annual Report and Receipt of Comment	Department of Public Works	**Spring '04/'05/'06/'07/'08** • Prepare an annual report. • Annually send a press release advertising the public comment period and the status of the Town's SWMP to the *Stoneham Independent* and *Stoneham Sun* and track whether it was published. • Advertise the public comment period on the public cable access channel. • Receive comments on the annual report. • Submit an annual report to both the Environmental Protection Agency and MA Department of Environmental Protection.	The Annual Report for Permit Year 4 was completed and submitted in 2007.	The Annual Report for Permit Year 5 will be completed and submitted in 2008. The Annual Report will be made available at the DPW.
2-3	Provide Assistance to Local Cleanup Activities	Department of Public Works	**Spring '03 –Winter '08/09** • Post advertisement offering assistance with local cleanup activities on the Town's website and within the *Stoneham Independent* and *Stoneham Sun.* • Track the number of cleanup activities that the DPW assists annually. • Track the number of cleanup participants at these activities. • Track which areas of Town are cleaned by these activities. • Track the quantity of waste collected as a result of these cleanup activities.	An advertisement offering assistance with local cleanup activities was placed in the *Stoneham Independent* and *Stoneham Sun.* During Permit Year 5 several community groups cleaned up public grounds.	The DPW will continue to advertise offering assistance with local cleanup activities on the Town's website and in the *Stoneham Independent* and *Stoneham Sun.*

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2-4	Provide Assistance to Storm Drain Stenciling Activities	Department of Public Works	**Spring '04 – Winter '08/09** • Post advertisement offering assistance with storm drain stenciling activities on the Town's website and within the *Stoneham Independent* and *Stoneham Sun.* • Track the number of drains stenciled each year. • Track the number of participants each year.	An advertisement offering assistance with storm drain stenciling activities was placed in the *Stoneham Independent* and *Stoneham Sun.* During Permit Year 5, no storm drains were stenciled.	The DPW will continue to advertise offering assistance with storm drain stenciling activities on the Town's website and in the *Stoneham Independent* and *Stoneham Sun* and continue to track the number and location of stenciling activities.

2a. Additions

No additions to report at this time.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3-1	Field Verify Outfall Locations	Department of Public Works	**Spring '04 – Winter '08/09** • Develop a schedule for outfall verification and outfall identification activities. • Perform and track the outfall verification and outfall identification activities as scheduled. • Continuously update the storm drainage system map as new or corrected information is added.	While a formal schedule for outfall verification has not been developed, the DPW routinely visits the outfalls as part of the inspection and maintenance program. Inspection and maintenance activities were recorded in a daily log book.	The DPW will continue to routinely visit the outfalls as part of the inspection and maintenance program. Inspection and maintenance activities will continue to be recorded in a daily log book. The DPW will update the storm drainage system as new or corrected information is added.
3-2	Development and Adoption of a Stormwater Bylaw	Planning Board Stoneham Conservation Commission Department of Public Works Building Department	**Winter '04/'05 – Winter '08/09** • Draft the Stormwater Bylaw, which will address (1) illicit discharges, (2) erosion and sedimentation from construction activities, and (3) stormwater runoff from new development and redevelopment projects. • Present Stormwater Bylaw to Town Meeting for adoption. • Post Stormwater Bylaw on Town's website. • Track the number of enforcement actions taken.	Because of staffing limitations, no work was performed on developing the stormwater bylaw during Permit Year 5.	The DPW will begin developing a stormwater bylaw for the Town.
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Department of Public Works	**Winter '04/'05 – Winter '08/09** • Develop an IDDEP. • Conduct dry-weather field screening of outfalls and track the number of surveys indicating a possible illicit connection. • Trace the source of potential illicit discharges. • Track the number of illicit connections found. • Track the number of illicit connections repaired/replaced. • Report on the success of obtaining alternative funding to assist in illicit connection removal.	The DPW did not develop an IDDEP. However, the DPW continually monitors its open brooks for gray water and, when found, works to identify the source. No gray water was found during Permit Year 5. Identification of gray water and corrective actions are recorded in a daily log book.	The DPW will continue to monitor its open brooks for gray water and identify the source, when gray water is found. Identification of gray water and corrective actions will continue to be recorded in a daily log book.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3-4	Conduct Infiltration/Inflow Removal from Sanitary Sewer	Department of Public Works	**Spring '03 –Winter '08/09** • Perform I/I investigations of the sanitary sewer system and track the results. • Perform capital improvement projects to remove I/I.	The DPW conducted I/I identification and removal activities for 4 miles of the sanitary sewer system throughout the Town. The Town performed capital improvement projects to remove I/I, including manhole sealing, pipe rehabilitation, pipe replacement and grouting. The DPW maintained records of these activities.	The DPW will continue to conduct I/I identification and removal activities within the sanitary sewer system throughout the Town. The Town will also continue capital improvement projects as required. The DPW anticipates spending at least $408,000 to perform these activities on 4 to 6 miles of sanitary sewer. The DPW will maintain records of these activities.

3a. Additions

No additions to report at this time.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3-2	Development and Adoption of a Stormwater Bylaw			See Section 3: Illicit Discharge Detection and Elimination	
4-1	Develop a Site Inspection Form and Conduct Site Inspections	Department of Public Works	**Spring '05 – Winter '08/09** • Develop an ESC Site Inspection Form that reflects the ESC requirements. • Track the frequency of inspections conducted for each site. • Track the completion of inspection forms. • Track the number of failed ESC BMPs discovered on each site.	No activities were planned for Permit Year 5 because the Stormwater Bylaw was under review.	Since the Stormwater Bylaw is in the initial development stages, the DPW will delay drafting the ESC Site Inspection Form, until the Stormwater Bylaw has been developed.
4-2	Develop and Implement a Citizen Tip Line	Department of Public Works	**Fall '05 – Winter '08/09** • Establish the Citizen Tip Line. • Advertise the Citizen Tip Line. • Track the number of complaints received via the Citizen Tip Line. • Track the problems/incidents remedied as a result of the Citizen Tip Line.	Residents currently contact the DPW during working hours and the police during non-working hours when stormwater related problems/incidents occur. Residents can also notify the DPW through the Town's website. The DPW maintains a complaint log in which complaints are tracked by category. These practices are being done in lieu of a Citizen Tip Line.	Residents will continue to contact the DPW during working hours and the police during non-working hours and use the Town website when stormwater related problems or incidents occur. The DPW will continue to maintain a complaint log in which complaints are tracked by category.

4a. Additions

No additions to report at this time.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3-2	Development and Adoption of a Stormwater Bylaw			See Section 3: Illicit Discharge Detection and Elimination	

5a. Additions

No additions to report at this time.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6-1	Develop a Formal Training Program for DPW Staff	Department of Public Works	**Fall '05 – Winter '08/09** • Develop the DPW employee training manual. • Conduct training sessions with all current employees. • Train all new DPW employees in accordance with the training program requirements. • Track the number of employees trained. • Conduct refresher training for employees after every two years of employment.	An employee training manual has not been developed. However, the DPW staff currently receives hands-on training for stormwater best management practices.	Because of budget cuts, the DPW does not have the resources to hire new staff. Therefore, the existing DPW staff will continue to receive hands-on training for stormwater best management practices.
6-2	Catch Basin Cleaning Program	Department of Public Works	**Spring '03 – Winter '08/09** • Clean all catch basins on an annual basis. • Document annual cleaning activities and keep all records through the permit term.	The DPW completed the annual catch basin cleaning program as scheduled. The DPW attempted to track sources of illegal material in catch basins.	The DPW will continue the annual catch basin cleaning program.
6-3	Parking Lot and Street Sweeping Program	Department of Public Works	**Spring '03 – Winter '08/09** • Track the streets and lots that are swept each year. • Maintain a log of the disposed materials	The DPW completed annual parking lot and street sweeping program as scheduled.	The DPW will continue annual parking lot and street sweeping program.
6-4	Develop a Vehicle and Equipment Maintenance Policy	Department of Public Works	**Fall '05 – Winter '08/09** • Develop and implement a Vehicle and Equipment Maintenance Policy and incorporate policy requirements into the DPW employee-training program.	The DPW enforced the Vehicle and Equipment Maintenance Policy. DPW employees received hands-on training with for this policy.	The DPW will continue to enforce the Vehicle and Equipment Maintenance Policy. DPW employees will continue to receive hands-on training with regard to this policy.
6-5	Develop a Vehicle and Equipment Cleaning Policy	Department of Public Works Fire Department Police Department	**Fall '05 – Winter '08/09** • Develop and implement a Vehicle and Equipment Cleaning Policy. • Place policy in the DPW employee-training manual and provide to the Town's Police Department and Fire Department. • Review MADEP's vehicle rinsing policy when issued and develop a plan to come into compliance with it.	The DPW enforced the Vehicle and Equipment Cleaning Policy. DPW employees received hands-on training for this policy.	The DPW will continue to enforce the Vehicle and Equipment Cleaning Policy. DPW employees will continue to receive hands-on training with regard to this policy.
6-6	Develop a Landscaping and Lawn Care Policy	Department of Public Works	**Spring '05 – Winter '08/09** • Develop and implement a Landscaping and Lawn Care Policy. • Place policy in the DPW employee-training manual. • Educate landcaping/lawn care service companies retained by the Town on this policy.	The Town required that no pesticides and only organic fertilizers be used on Town property. This policy was written into the contracts for the landscaping/lawn care service companies employed by the Town.	The Town will continue to enforce the revised landscaping and lawn care policy. All landscaping/lawn care service companies will be required to follow the Town policy in their contracts.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6-7	Maintenance of Trash Racks and Outfalls	Department of Public Works	**Fall '05 – Winter '08/09** • Develop an inspection and maintenance plan for the trash racks and outfalls. • Educate DPW employees on the proper inspection and maintenance of the trash racks and outfalls. • Maintain records of inspection and maintenance activities.	The DPW inspected the outfalls before and after heavy rainstorms. When heavy rainstorms deposited a large amount of debris at the Town's drainage outfalls and inlets, the DPW removed this material and properly disposed of it. In addition, at the larger outfalls, silt was cleaned out once a year as part of routine maintenance. The inspection and maintenance activities were recorded in a daily log book.	The DPW will continue to perform inspection and maintenance activities at the outfalls and trash racks. The inspection and maintenance activities will continue to be recorded in a daily log book.
6-8	Maintenance of the Detention Basins at Stoneham Public Schools	Stoneham School Department	**Spring '04 – Winter '08/09** • Develop a maintenance plan for the detention basins at the elementary schools. • Educate school department staff on the proper maintenance of the detention basins. • Maintain records of maintenance activities.	The detention basins were maintained by the school department.	The detention basins will continue to be maintained by the school department.

6a. Additions

No additions to report at this time.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

NOT APPLICABLE TO THE TOWN OF STONEHAM

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Town of Stoneham did not collect and/or analyze any data during Permit Year 5.

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, 2007 through March 31, 2008)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	($)	
Total program expenditures since beginning of permit coverage	($)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

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

Mapping and Illicit Discharges

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

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
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)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or per basin contract rate **	($/hr or $ per basin)	
• Disposal cost**	($)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vactor **	(%)	

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	
• Disposal cost**	($)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

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)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection