

Municipality/Organization: Stoneham, Massachusetts

EPA NPDES Permit Number: MA041062

MassDEP Transmittal Number: W-040960

Annual Report Number

& Reporting Period:

April 1, 2015 – March 31, 2016

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

Part I. General Information

Contact Person: Robert E. Grover, P.E.

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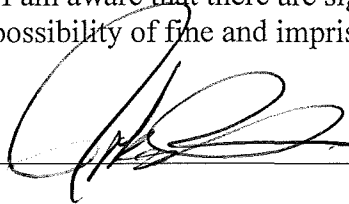
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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: Robert E. Grover

Director, Department of Public Works

Date:

7-7-16

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1-1	Place Educational Information on the Town's Website	Dept. of Public Works	Winter '03/04 – Winter '14/15 - Post stormwater related information on the Town's website - Update website regularly	The Town has a new website. Links to EPA sites relating to stormwater will be added. The Town has a SeeClickFix button on its homepage for reporting problems.	To be determined (TBD) based on issuances and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts.
1-2	Conduct Household Hazardous Waste Collection Days	Dept. of Public Works	Fall '03 through '15 - 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 website. - Track the amounts and types of waste collected each year. - Track the number of Stoneham vehicles/residents that participate in each event	The Town is holding Household Hazardous Waste Collection Days jointly with Melrose. This joint effort provides for at least two Household Hazardous Waste day per year. One occurred in October 2015 and the next one is scheduled for June 2016.	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1-3	Intensify the Existing Pet Waste Management Campaign	Board of Health Animal Control Officer Dept. of Public Works	Spring '04 through '16 - 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. - Maintain and install information “Pet Waste” signs	The brochure is available at the library, Town Hall, DPW and through the Town Clerk. The Town’s “Animals and Fowl” bylaw has a “duty to dispose” of pet waste section including fines for violations. New “Pet Waste” signs have been installed at parks and other high volume areas. A “Dogi-Pot” station has been installed at A.P Rounds Park.	TBD
1-4	Place Educational Information on Stoneham Community Access Television	Dept. of Public Works Stoneham Community Access Television	Fall '04 through Spring '16 - 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.	Stoneham TV broadcasted stormwater related PSAs during Permit Year 12	TBD
1-5	Promote Water Conservation Practices for Homeowners	Dept. of Public Works	Spring '03 through '16 - 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.	Educational materials were available at the library, Town Hall, DPW and through the Town Clerk. Low-flow showerheads were available to residents at no cost.	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1-6	Develop a Press Release and Flyer Targeting Community Businesses	Dept. 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.	No action planned for permit year 12. However, the site plan review process includes requirements for onsite stormwater management. The site plan review process is applicable to new development and upgrades to existing development.	TBD

1a. Additions

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
1-7	Develop a Stormwater Brochure for General Public	Dept. of Public Works	Summer '05 through Spring '16 Develop and issue a brochure education 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 at the library, Town Hall, DPW and through the Town Clerk.	TBD

2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
2-1	Public Access to SWMP and Receipt of Comments	Dept. of Public Works Library	Fall '03 through Spring '16 • 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 library and Town's website.	A Copy of the Storm Water Management Program continues to be available at the library, Town Hall, DPW and through the Town Clerk.	To be determined (TBD) based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts.
2-2	Public Access to Annual Report and Receipt of Comment	Dept. of Public Works	Spring '04 through '16 • 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 12 was completed and submitted in 2015. The annual reports are available at the DPW office.	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
2-3	Provide Assistance to Local Cleanup Activities	Dept. of Public Works	Spring '03 through '16 - 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 and mentioned at the Selectmen's meeting. During Permit Year 12 several community groups cleaned up public grounds. Additionally some local court ordered community service obligations are met through cleanup activities under the DPW. The DPW provides personnel, trucks, bags, rakes, gloves and material disposal to groups performing cleanup activities.	TBD
2-4	Provide Assistance to Storm Drain Stenciling Activities	Dept. of Public Works	Spring '04 through '16 - 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.	Eagle Scouts stenciled storms drains throughout the Town during permit year 7. The stenciling has begun to fade; no stenciling activity occurred in permit year 12. In 2012, the Town applied for, but did not receive a grant for metal disks that can be epoxied to granite curbing headers. Re-stenciling will continue to be included for public participation activities during 2016.	TBD

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
3-1	Field Verify Outfall Locations	Dept. of Public Works	Spring '04 through '16 - 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 correct information is needed.	The DPW routinely visits the outfalls as part of the inspection and maintenance program. Inspection and maintenance activities were recorded in a logbook. The DPW updates the storm drainage system as new or corrected information is added. Each outfall is labeled with a permanent plate.	To be determined (TBD) based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts.
3-2	Development and Adoption of a Stormwater Bylaw	Planning Board Conservation Commission Dept. of Public Works Building Department	Winter '04 through Spring '16 - Draft the Stormwater Bylaw, which will address (1) illicit discharges, (2) erosion and sedimentation from construction activities, and (3) stormwater runoff from the 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.	Rules and regulations regarding the use of storm drains in the Town of Stoneham were adopted by the Stoneham Stormwater Board effective July 1, 2010. These rules and regulations are available on the Town's website and are being enforced. Compliance with the rules has been 100%. Some site plans complying with the regulations include rain gardens as their BMP	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Dept. of Public Works	Winter '04 through Spring '16 • Develop an IDDE Plan • 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 repaired/replaced. • Report on the success of obtaining alternative funding to assist in illicit connection removal.	The DPW continually monitors its open brooks for gray water and when found works to identify the source. The DPW has a contract with Arcadis and is working with the EPA regarding a Clean Water Act Administrative Order. Stoneham coordinates with Todd Borci at the EPA's Office of Environmental Stewardship on compliance with the Administrative Order.	TBD
3-4	Conduct Infiltration/Inflow Removal from Sanitary Sewer	Dept. of Public Works	Spring '03 through '16 • Perform I/I investigation of the sanitary sewer system and track the results. • Perform capital improvement projects to remove I/I.	The DPW continues to propose and perform projects associated with I/I removal. These capital improvement projects remove I/I through manhole sealing, pipe rehabilitation, pipe replacement and grouting.	TBD

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
4-1	Development and Adoption of a Stormwater Bylaw			See Section 3: Illicit Discharge Detection and Elimination BMP ID#3-2	To be determined (TBD) based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts.
4-2	Develop a Site Inspection Form and Conduct Site Inspections	Dept. of Public Works	Spring '05 through Spring '16 • 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.	As part of the stormwater rules and regulation, a stormwater Board was created to promulgate, adopt, implement, enforce and amend stormwater regulations. The Conservation Agent is a member of the Stormwater Board. Site ESC are consistent with the requirements in Conservation Commission jurisdictional area. The Town is presently revising its stormwater regulations.	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
4-3	Develop and Implement a Citizen Tip Line	Dept. of Public Works	Fall '05 through Spring '16 • 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 current 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 Town has implemented a SeeClickFix button on its website for citizen tips. The DPW maintains a computerized complaint log in which complaints are tracked by category.	TBD

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
5-1	Development and Adoption of a Stormwater Bylaw			See Section 3: Illicit Discharge Detection and Elimination BMP ID#3-2	To be determined (TBD) based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts.

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 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
6-1	Develop a Formal Training Program for DPW Staff	Dept. of Public Works	Fall '05 through Spring '16 - 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.	DPW staff received hands-on training for stormwater best management practices.	To be determined (TBD) based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts.
6-2	Catch Basin Cleaning Program	Dept. of Public Works	Spring '03 through '16 - Clean all catch basins on an annual basis. - Document annual cleaning activities and keep all records through the permit term.	The DPW completes an annual catch basin cleaning program. The DPW attempted to track sources of illegal material in catch basins where identified.	TBD
6-3	Parking Lot and Street Sweeping Program	Dept. of Public Works	Spring '03 through '16 - Track the streets and lots that are swept each year. - Maintain a log of the disposed materials	The DPW completes an annual parking lot and street sweeping program as scheduled.	TBD
6-4	Develop a Vehicle and Equipment Maintenance Policy	Dept. of Public Works	Fall '05 through Spring '16 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 for this policy.	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
6-5	Develop a Vehicle and Equipment Cleaning Policy	Dept. of Public Works Fire Department Police Department	Fall '05 through Spring '16 - Develop and implement a Vehicle and Equipment Cleaning Policy. - Place policy in the DPW employee-training manual and provide to the Town's Police 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.	TBD
6-6	Develop a Landscaping and Lawn Care Policy	Dept. of Public Works	Spring '05 through '16 - Develop and implement a Landscaping and Lawn Care Policy. - Place policy in the DPW employee-training manual. - Educate landscaping/lawn care service companies retained by the Town on this policy.	The Town requires that no pesticides be used on Town property. This policy was written into the contracts for the landscaping/lawn care service companies employed by the Town	TBD
6-7	Maintenance of Trash Racks and Outfalls	Dept. of Public Works	Fall '05 through Spring '16 - 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 heavy rainstorms are predicted. 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 logbook.	TBD

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 13
6-8	Maintenance of the Detention Basins at Stoneham Public Schools	School Department	Spring '04 through '16 • 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. For newly installed detention basins on private properties, the Town requires that the homeowners maintain the BMP. If the homeowners do not properly maintain the BMP, the Town requires that the homeowners pay the Town to perform the work.	TBD

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

As part of the Town of Stoneham's Clean Water Act Administrative Order from EPA, wet- and dry-weather sampling was conducted at various outfalls and manholes throughout the collection system in 2015. These sampling results are included in this annual stormwater report on the next page.

Appendix A
Sampling Results – 2015
Table A-1

Structure ID	Date	Weather	Type	Location	Flow	Sampled	Surfactants	Ammonia	Total Chlorine	E. Coli
DMH UNK 1	12/14/2015	Dry	Manhole	Lindenwood Road @ Sweetwater Brook	Yes	Yes	0.25	0.5	0.0	4,600
DMH 143 (From IN-005)	12/14/2015	Dry	Manhole	High Street @ Marshall Road	Yes	Yes	0.25	0.1	0.0	1,700
DMH 143 (From DMH 147)	12/14/2015	Dry	Manhole	High Street @ Marshall Road	Yes	Yes	0.25	0.1	0.0	1,600
IN-005	12/14/2015	Dry	Inlet	Behind 95 High Street	Yes	Yes	0.25	0.1	0.0	1,500

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	(\$)	0
Total program expenditures since beginning of permit coverage	(\$)	0
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		N/A

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	N/A
Shoreline cleaned since beginning of permit coverage	(mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	2
▪ community participation **	(# or %)	293
▪ material collected **	(tons or gal)	3 Tons
School curricula implemented	(y/n)	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	(%)	98.47%

% of population on septic systems	(%)	1.53%
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Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	2
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 **	(#)	1

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 %)	1
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	N

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1/yr
Qty of structures cleaned **	(#)	2030
Qty. of storm drain cleaned **	(%, LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	400 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$24,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$11.35/per Basin
• Disposal cost**	(\$)	\$8,000
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified in contracts	(y/n)	N
• % Structures cleaned with clam shells **	(%)	100%
• % Structures cleaned with vactor **	(%)	0

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	1/yr
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1,000 Tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$40,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	N/A
• Disposal cost**	(\$)	\$20,000
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	N/A
• % 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:
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("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	None
▪ Herbicides	(lbs. or %)	None
▪ Pesticides	(lbs. or %)	None
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/l _n mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	1
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

Water Supply Protection

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