4/11/11

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Municipality/Organization: City of Revere

EPA NPDES Permit Number: MA041057

MassDEP Transmittal Number: **W-035316**

Annual Report Number & Reporting Period: **Year 8** **April 1, 2010 – March 31, 2011**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2011)

Part I. General Information

Contact Person: Frank Stringi Title: City Planner

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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: Thomas G. Ambrosino

Printed Name: Thomas G. Ambrosino

Title: Mayor

Date: 4/7/11

Part II. Self-Assessment

The City of Revere has completed the required self assessment and has determined that the City is in compliance with all permit conditions, except for the following provisions:

Part II. B.3 Storm drain stenciling program must be initiated with help from volunteers. Try to coordinate with school department for community service and with Saugus River and Mystic River watershed groups.

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
PE-1	Partnership Program	Planning	Education and outreach program developed by summer 04	Established partnership with school dept. and Saugus River Watershed Council	Continue partnership for developing new outreach program
Revised					
PE-2	Web site creation	MIS	Create web site by 04	Web site created in 07	Maintain web site on line
Revised					
PE-3	Household brochures and fact sheets	DPW	Distributed by summer 04	Created the brochures with the help of Mystic River Watershed Council and distributed in 07	Distributed in 07 and provided on the city web site
Revised					
PE-4	Commercial brochures and fat sheets	DPW	Develop and distribute to businesses in 07	Created commercial brochures with help from Mystic River Watershed Council and made available in 07	Distributed in 07 and provided on the city web site
Revised					
PE-5	Classroom education on stormwater	Saugus River Watershed Council and School Dept.	50% of K-12 by end of 07 school year	Program initiated with school dept. and Saugus River Watershed Council	Continue education effort and school trips with school dept.
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PP-1	Watershed organizations	Con Com	Organize watershed committee within one year	Watershed Committees organized for Mystic River Watershed, Saugus River, and Belle Isle marsh	Continue watershed action committees for Mystic River, Saugus River, and Belle Isle Marsh
Revised					
PP-2	Stakeholder meetings	Con Com	Hold at least two stakeholder meetings	Stakeholder meetings held separate watershed committees for Mystic River, Saugus River, and Belle Isle Marsh	Continue annual stakeholder meetings
Revised					
PP-3	Stream cleaning campaign	DPW/Saugus River watershed council	Hold at least two stream clean up campaigns every year	Clean up campaign held for Town Line Brook and Eastern County ditch as well as Mill Creek	Continue clean up campaign efforts (at least two per year)
Revised					
PP-4	Volunteer monitoring	Saugus River and Mystic River Watershed Groups	Complete water quality monitoring in 05	Water quality monitoring efforts taken annually for dry and wet weather by City of Revere and Mystic River Watershed Council	Continue yearly water quality monitoring of all outfalls
Revised					
PP-5	Storm drain stenciling	Con Com	Complete storm drain stenciling by 06	No progress made due to lack of staff	Attempt to work with school dept. to set up volunteers for community service program
Revised			Complete storm drain stenciling by 2012		
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
IDDE-1	Storm drain map	Engineering	Update storm drain map by 06	Storm drain map completed in 2010 with new GIS	Continue updates to map
Revised					
IDDE-2	Non storm water discharge ordinance	Planning	Adopt non storm water discharge ordinance by 06	Non storm drain discharge ordinance adopted by City of Revere in 05	
Revised					
IDDE-3	Industrial/business connections	Plumbing Inspector	Establish industrial/business connection monitoring program by summer 04	Cross connection inspection program initiated through Inspectional Services Dept.	Continue cross connection inspection program through Inspectional Services Dept. and Plumbing Inspector
Revised					
IDDE-4	Illicit discharge and elimination	DPW	Establish illicit discharge and elimination program by summer 04	Illicit discharge and elimination program undertaken by DPW sewer and drain division under the IDDE program developed under a contract with Weston & Sampson	Continue IDDE program
Revised					
IDDE-5	Illegal dumping task force	Con Com	Form an illegal dumping task force by 04	Con Com holding monthly inspection meetings on Saturday mornings	Continue monthly meeting and inspection schedule
Revised					
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
CSRC-1	Site Plan Review	Planning	Establish site plan review standards by 04	Site Plan Review in place. Meetings held every Tuesday	Continue site plan review meetings every Tuesday
Revised					
CSRC-2	Sediment control ordinance	Planning	Develop erosion control ordinance by 04	Erosion control ordinance adopted in 05	
Revised					
CSRC-3	Storm water pollution prevention plan	DPW	Require storm water pollution prevention plan for all projects by 04	DPW meets every Tuesday with the site plan review committee to discuss storm water pollution prevention measures with developers and contractors for all proposed development sites	Continue DPW participation in site plan review committee meetings
Revised					
CSRC-4	Inspection program guidelines	Inspectional Services Dept.	Set up guidelines for inspections by 04	Building Inspector, City Engineer and City Planner coordinate inspection of development sites on a weekly basis	Continue weekly inspection of development sites to ensure sediment control measures are in place
Revised					
CSRC-5	BMP measures for sediment/erosion	DPW	Establish BMP measures for construction sites by 04	Site plan review conditions are placed on all new construction projects for BMP measures	Continue site plan review efforts to condition BMP measures for new developments. Place conditions on building permits
Revised					
Revised					

4a. Additions

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PCRC-1	Construction runoff ordinance	Planning	Adopt a post construction runoff ordinance by 06	Post construction runoff ordinance adopted in 05	
Revised					
PCRC-2	Site Plan Review	Planning	Adopt site plan review standards for post construction by 06	Site plan review standards in place	
Revised					
PCRC-3	Operation and maintenance agreement	DPW	Develop an operation and maintenance model agreement by 05	Site plan review conditions require operation and maintenance agreements for BMP's developed for private construction sites	
Revised					
PCRC-4	Inspection program guidelines	Dept. of Inspectional Services	Set up inspection program for post construction runoff control by 05	Meetings have been held with Inspectional Services Dept. to discuss inspection program and staffing. Staff, duties and program have been established	
Revised					
PCRC-5	BMP measures	DPW	Establish BMP measures for post construction by spring 04	BMP measures for post construction have been included within site plan review conditions	Continue to require BMP measures for post construction within the framework of the site plan review process for development sites
Revised					
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
MGH-1	Pet waste collection	Dept. of Inspectional Services	Distribute pet waste brochures to pet owners by spring 04	Pet waste brochures developed and mailed to registered pet owners	
Revised					
MGH-2	Parking lot and street cleaning program	DPW	Implement a parking lot and street cleaning program by spring 04	Street cleaning program implemented in 03 from April to November	Continue yearly street cleaning program from April to November
Revised					
MGH-3	Catch basin cleaning	DPW	Implement catch basin cleaning program by spring 04	Catch basin cleaning program implemented on a regular basis in 03	Continue annual catch basin cleaning program
Revised					
MGH-4	Road salt storage	DPW	Institute measures for road salt storage by 04	Road salt storage shed installed at DPW facility on Charger Street	Maintain road salt storage shed at DPW facility
Revised					
MGH-5	Spill response and prevention	Fire Dept.	Implement a spill response and prevention plan by 05	Spill response and prevention plan has been instituted by the Fire Dept.	Continue implementation of spill response and prevention plan with adequate training from Fire Dept.
Revised					
Revised					

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
TMDL-1	Parking lot and street sweeping	DPW	Program set up by 04	Program implemented in 03	Continue program
Revised					
TMDL-2	Catch basin cleaning	DPW	Program set up by 04	Program implemented in 03	Continue program
Revised					
TMDL-3	Install deep sumps	DPW	Requirement set up for newly constructed catch basins by 04	Program implemented in 03. All new catch basins both public and private require deep sumps	Continue program
Revised					
TMDL-4	Install gas and oil separators	DPW	Requirement set up for newly constructed catch basins by 04	Program implemented in 03. All new catch basins within private parking lots require installation of gas and oil separators	Continue program requirement
Revised					
TMDL-5	Detention areas	DPW	Requirement established for large development sites through site plan review process	Requirement implemented in 03 as part of site plan review for all large development sites	Continue program requirement
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Strict adherence to an operation and maintenance plan is essential for continued success of TMLD reductions.

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, 2010 through March 31, 2011)

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 %)	5,000
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.)	yes
Shoreline cleaned since beginning of permit coverage	(mi.)	3
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	12
▪ community participation **	(# or %)	unavailable
▪ material collected **	(tons or gal)	see attached
School curricula implemented	(y/n)	yes

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	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	(#)	119
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	
▪ GIS	(%)	100
Outfalls inspected/screened **	(# or %)	119
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	119
Illicit discharges identified **	(#)	16
Illicit discharges identified (Since beginning of permit coverage)	(#)	16
Illicit connections removed **	(#); and (est. gpd)	10
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	10
% of population on sewer	(%)	>99
% of population on septic systems	(%)	<1

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 **	(#)	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)	yes
Low-impact development (LID) practices permitted and encouraged	(y/n)	yes

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 **	(#)	568
Qty. of storm drain cleaned **	(%, LF or mi.)	37,440
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	unknown
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Jayco

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	40,000
• Hourly or per basin contract rate **	($/hr or $ per basin)	$55/basin
• Disposal cost**	($)	100,000
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	1
• Vacuum trucks specified in contracts	(y/n)	yes
• % Structures cleaned with clam shells **	(%)	0
• % Structures cleaned with vactor **	(%)	100

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	8
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	210
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	300
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Jayco
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$111,668
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	
• Disposal cost**	($)	$100,000
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 ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	75%
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/ln mi. or %)	20% increase
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	20% increase
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
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)	yes

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	NA
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	NA

• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	NA

REVERE DPW

RESIDENTIAL HAZARDOUS HOUSEHOLD PRODUCT COLLECTION
(FOR THE CALANDAR YEAR ENDING DECEMBER 31, 2010)

AUTO BATTERIES	196 UNITS
TIRES	8 TONS
PROPANE TANKS	330 UNITS
PAINT	28 CUBIC YARD BOXES
WASTE OIL	770 GALLONS
USED OIL FILTERS	7 – 55 GALLON DRUMS
THERMOMETERS	29 UNITS
THERMOSTATS	3 UNITS
HOUSEHOLD BATTERIES	2 – 5 GALLON PAILS
ANTI-FREEZE	5 – 55 GALLON DRUMS
BUTTON BATTERIES	3 – 5 GALLON PAILS
MERCURY SWITCHES	0 UNITS
CRTs/ELECTRONICS	119,000 LBS