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Municipality/Organization: City of Chelsea

EPA NPDES Permit Number: MAR041077

MaDEP Transmittal Number: W-

Annual Report Number & Reporting Period: 7
No. 6: March 09-March 10

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Andrew B. DeSantis **Title:** Assistant Director, Chelsea DPW

Telephone #: 617-466-4206 **Email:** adesantis@chelseama.gov

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: Jay Ash

Printed Name: Jay Ash

Title: City Manager

Date:

Part II. Self-Assessment

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

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) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
PE-1	Partnership Program w/Chelsea Greenspace & Mystic River Watershed Org.	DPW/Andrew B. DeSantis	Conduct Public Forums on a yearly basis.	Attended Meetings of Mystic River Steering Committee Planning Group, became member of Mystic River Steering Committee. Presented at Cities of the Future Blue Cities Urban Rivers Symposium March 7, 2010.	Continued attendance at Meetings of Mystic Revere Steering Committee. Conduct Storm Water Class as part of Chelsea Community Schools on Saturday, June 26, 2010.
PE-2	Educational Material Distribution	DPW/Andrew B. DeSantis	Distribute materials 2x per year at community events	Informational materials maintained on public stand in City Hall Corridor. Stormwater Webpage created: http://www.chelseama.gov/Public_Documents/ChelseaMA_DPW/stormwater	Distribute materials 2x per year at community events
PE-3	Outreach to Latino Community	DPW/Andrew B. DeSantis	Develop Spanish Language Brochure within 1 year		Develop Spanish Language Brochure within 1 year

1a. Additions

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2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
PP-1 Revised	Hold Co-ordination Meetings	DPW/Andrew B. DeSantis	Hold Coordination Meetings with Chelsea Greenspace and Mystic River Watershed Organization on a semi-annual basis	Attended Mystic River Steering Committee meeting with various stakeholders from governmental agencies and interested Citizens Groups	Attend Mystic River Steering Committee meetings on a quarterly basis and continue coordination with Mystic River Watershed Association.
PP-2 Revised	Storm Drain Stenciling	DPW/Andrew B. DeSantis	Stencil all catch basin structures within 3 years		Re-stencil 30% of catch basins. Begin implementation of
PP-3 Revised	Volunteer Monitoring	DPW/Andrew B. DeSantis	Continue Volunteer Monitoring on an annual basis	Mystic River Watershed Organization monitoring outfalls every 3 months.	Continue monitoring
PP-4 Revised	Stakeholder Meetings	DPW/Andrew B. DeSantis	Hold annual stakeholder meeting	As noted above.	Hold annual stakeholder meeting
Revised					
Revised					
Revised					

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
IDDE -1	Storm Drain Map	DPW/Andrew B. DeSantis	Update Storm/Sanitary Sewer Map Yearly (ongoing)	Storm Drain Map updated January 2010. Additional info being developed regarding all tributary drainage areas.	Ongoing efforts in conjunction with IDDE activities.
IDDE -2	Non-stormwater discharge Ordinance	DPW/Andrew B. DeSantis	Adopt Non-stormwater discharge Ordinance within 2 years.	Adopted revised Sewer, Water and Storm Water Ordinances October 19, 2009.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
IDDE -3	Industrial/Business Connections	DPW/Andrew B. DeSantis	Establish Monitoring Program within 2 years.	Began IDDE work this year.	\$125,000 annually adopted in five year capital plan for storm water work.
IDDE -4	Illicit Discharge Detection and Elimination	DPW/Andrew B. DeSantis	Establish Program within 1 year	Began IDDE work this year	\$125,000 annually adopted in five year capital plan for storm water work.
Revised					
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) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
CSRC -1	Develop Storm Water Discharge Permitting Standards	DPW/Andrew B. DeSantis	Establish Permitting Standards within 1 year.	Adopted revised Sewer, Water and Storm Water Ordinances October 19, 2009.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
CSRC -2	Erosion Sediment Control Ordinance	DPW/Andrew B. DeSantis	Develop Ordinance within 1 year.	Adopted revised Sewer, Water and Storm Water Ordinances October 19, 2009.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
CSRC -3	Inspection Program Guideline	DPW/Andrew B. DeSantis	Establish within 1 year.	Funding provided in Fy09 Capital Improvement Program.	Complete by end of 2nd quarter year 8.
Revised					
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) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
PCRC -1	Post Construction Ordinance	DPW/Andrew B. DeSantis	Develop within 1 year.	Adopted revised Sewer, Water and Storm Water Ordinances October 19, 2009.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
PCRC -2	Operation and Maintenance Agreement	DPW/Andrew B. DeSantis	Develop within 1 year	Operation Maintenance plans required of any new development/redevelopment.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
PCRC -3	Inspection program guidelines	DPW/Andrew B. DeSantis	Set up inspection program for post construction runoff controls within 2 years	Funding provided in Fy09 Capital Improvement Program.	Complete by end of 2nd quarter year 8.
Revised					
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) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
MGH -1	Street Cleaning Program	DPW/Andrew B. DeSantis	Continue ongoing program of sweeping every street twice a month from April 1 to November 30.	Ongoing	Continue program.
MGH -2	Programmed Catch Basin Cleaning	DPW/Andrew B. DeSantis	Continue ongoing contracted catch basin cleaning at the rate of 33% of all catch basins per year.	500 Catch basins cleaned year 6.	Clean 500 catch basins year 7.
MGH -3	Spill Response & Prevention	DPW/Andrew B. DeSantis	Review existing response plan and update within 1 year.	Not completed	Complete review and update by end of 2nd quarter of year 8.
Revised					
Revised					
Revised					
Revised					

6a. Additions

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) N Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities N Permit Year 8
TMD L-1 Revised	Streetsweeping	DPW/Andrew B. DeSantis	Continue contracted program of streetsweeping every street 2x/month March 1 to December 31	Ongoing Nprogram expanded with new sweeping contract procurement by two months.	Continue program.
TMD L-2 Revised	Catch Basin Cleaning	DPW/Andrew B. DeSantis	Continue contracted program of cleaning 33% of catch basins per year	500 Catch basins cleaned year 7	Clean 500 catch basins year 8.
TMD L-3 Revised	Deep Sump Catch Basins	DPW/Andrew B. DeSantis	Require new and replacement catch basins to have deep sumps of CSRC-1	All newly installed catch basins for developments/redevelopments and roadway storm drain construction constructed with deep sumps.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
TMD L-4 Revised	Oil and gas separators	DPW/Andrew B. DeSantis	Institute requirement in conjunction with CSRC-1	Catch basins at all new developments required to have oil and gas separators.	Update in conjunction with permit conditions of revised NPDES MS4 permit.
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The following storm water outfalls were inspected and information collected:

- 04/23/2008 Hot Spot Sampling by Mystic River Watershed Organization – Outfall CHE x10 Mill Creek
- 7/18/2008 Dry Weather Sampling for the City of Chelsea DPW by Weston and Sampson Engineers – All City Owned outfalls Island End River, Mystic River, Chelsea River and Mill Creek.
- 7/21/2008 to 9/4/2008 Urban River Surface Monitoring by EPA – Various outfalls Mill Creek & Island End River
- 7/24/2008 Wet Weather Sampling for the City of Chelsea DPW by Weston and Sampson Engineers – All City Owned outfalls Island End River, Mystic River, Chelsea River and Mill Creek.
- 9/12/2008 Bacterial Assessment: Wet and Dry Weather Monitoring at Mystic River Outfall Pipes by Mystic River Watershed Organization – Various Outfalls
- April 2009 – Combined Sewer Overflow Annual Report for the City of Chelsea January 1, 2008 to December 31, 2008 by R.H. White
- September 2009 – 2009 Outfall Monitoring submitted as part of response to EPA administrative order by Weston and Sampson Engineers
- January 2010 – EPA Clean Water Act Administrative Order (Docket No. 09-008) Required Submittal IDDE/CMOM Progress Report Weston and Sampson Engineers
- January 2010 - EPA Clean Water Act Administrative Order (Docket No. 09-008) Required Submittal Digital/Geographic Information System (GIS) Map. Weston and Sampson Engineers

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)
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Estimated number of residents 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.)	
Household Hazardous Waste Collection Days		1
▪ days sponsored	(#)	1
▪ community participation	(%)	
▪ material collected	(tons or gal)	.5 T
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	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

Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	25
System-Wide mapping complete	(%)	99
Mapping method(s)		
▪ Paper/Mylar	(%)	100

▪ CADD	(%)	
▪ GIS	(%)	99
Outfalls inspected/screened	(# or %)	100
Illicit discharges identified	(#)	2
Illicit connections removed	(#)	
% of population on sewer	(est. gpd)	
% of population on septic systems	(%)	100
	(%)	0

Construction

Number of construction starts (>1-acre)	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100
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 completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

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)	
Total number of structures cleaned	(#)	500
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	

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)	16
Qty. of sand/debris collected by sweeping	(lbs. or tons)	1100
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	landfill
Cost of sweepings disposal	(\$)	38000
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (~N/A " = never used; ~100% " = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios		% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand
Pre-wetting techniques utilized		(y/n) y
Manual control spreaders used		(y/n)
Automatic or Zero-velocity spreaders used		(y/n)
Estimated net reduction in typical year salt application		(lbs. or %)
Salt pile(s) covered in storage shed(s)		(y/n) y
Storage shed(s) in design or under construction		(y/n)