



COMPREHENSIVE
ENVIRONMENTAL
INCORPORATED

April 30, 2009

Glenda Velez
US EPA – CIP
One Congress Street, Suite 1100
Boston, MA 02114

**Re: NPDES Stormwater General Permit
2008-2009 Annual Report
Town of Hingham, MA**

- Engineering
- Design
- Construction
- Inspection

Responsive
service,
cost-effective
solutions,
technical
excellence

Dear Ms. Velez:

On behalf of the Town of Hingham, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2008-2009 Annual Report. The Annual Report has simultaneously been filed with the Massachusetts Department of Environmental Protection.

If you have any questions or require any additional information, please do not hesitate to call me at (800)725-2550 ext. 307.

Sincerely,

Comprehensive Environmental Inc.

Richard Niles
Project Manager

- Water & Wastewater
- Parks & Recreation
- Drainage & Flooding
- Hazardous Waste
- Transportation
- Stormwater & LID
- Watershed Restoration

cc: Massachusetts Department of Environmental Protection, Boston Office
Randy Sylvester, DPW Superintendent, Town of Hingham

Enclosure – NPDES Phase II Small MS4 General Permit 2008-2009 Annual Report

Municipality/Organization: Town of Hingham, MA

EPA NPDES Permit Number: MAR041100

MADEP Transmittal Number: W-041003

Annual Report Number

& Reporting Period: No. 6: May 1, 2008-April 30, 2009

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Randy Sylvester

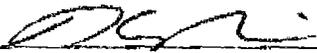
Title: DPW Superintendent

Telephone #: 781-741-1430

Email: sylvesterr@hingham-ma.com

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: Kevin Paicos

Title: Town Administrator 

Date: April 30, 2009

Part II. Self-Assessment

The Town of Hingham has completed the required self-assessment of the annual compliance review for the Phase II Stormwater Program. In accordance with the NPDES Phase II Stormwater requirements, the following topics were evaluated for the completion of the Annual Report:

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program's Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

The Town 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 6	Planned Activities – Next Permit Term
1A Revised	Distribute Brochures and Fact Sheets to Businesses & Residents	Department of Public Works (DPW)	Copies of materials.	Stormwater educational materials were made available to the public at the Town Hall and Town Library.	Continue to discuss the Phase II Program at Town Department coordination meetings. Continue to make copies of handouts and flyers available at public facilities throughout the year.
1B Revised	Send Out Stormwater Press Releases	DPW	Copies of articles.	A flyer was mailed to residents in December, 2008 advertising the May 16, 2009 Household Hazardous Waste Collection Day ¹ . The availability of stormwater videos was discussed with the library. Both videos are available for rental. The stormwater hotline number was published in the paper, flyers and Town website.	Continue press releases to outline the ongoing stormwater activities led by the Town and others. Explore ways to further promote the stormwater hotline.
1C Revised	Develop Stormwater Section of Town Website	DPW and Town Website Manager(s)	Measure number of hits annually.	Additional stormwater runoff informational links were posted on the website, including a link to the US EPA.	The website will be updated and expanded as the Phase II program progresses and additional information becomes available. Hits will be measured annually.
¹ The collection event is also advertised at the Hingham Transfer Station with flyers, in newspaper publications, on the DPW section of the Town website and through local cable broadcasts. The information outlines proper practices for disposal of wastes.					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
1D	Create a Stormwater Educational Display	Conservation Commission	Track quantity of take home materials taken quarterly.	The educational display at the Conservation Commission office in Town Hall was updated. Approximately 30 handouts were taken by residents from the displays.	Continue to update stormwater display materials at public facilities and track quantities of take home material. Evaluate ways to improve public interest and exposure to materials, such as making materials available in additional locations.
Revised					
1E	Develop and Broadcast Stormwater Presentation on Local Cable Network	DPW and Town Officials	Cable TV tapes of presentations. Show annually during permit term.	Information regarding local events such as the household hazardous waste collection days was broadcast weekly in advance of the event. The EPA video “Reigning in the Storm” was shown at two elementary school exposition events, including an event at Foster School and another at Plymouth River School.	Broadcast a stormwater update at a Selectmen’s meeting on the local cable channel. Broadcast the EPA videos “After the Storm” and “Reigning in the Storm” on the local cable channel as airtime is available.
Revised	Broadcast the Progress of the Phase II Program w/ Selectmen Meetings		Use of EPA video & broadcast of Town Selectmen Meetings		
1F	Establish a Program for Free Stormwater Video Rentals	DPW and Planning Board	Track video rentals annually.	Two copies of the EPA video “After the Storm” and a copy of “Reigning in the Storm” were advertised on the Town website and made available at the Town library for rental; the video “Reigning in the Storm” was rented 10 times.	Continue to offer the videos “After the Storm” and “Reigning in the Storm” at the Town library for rental. Continue to advertise the video rentals on the Town website and cable channel.
Revised					

1a. Additions – None at this time

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
2A	Establish a Stormwater Telephone Hotline	DPW and Town Website Manager(s)	Record number of phone calls to hotline, copies of advertisements.	The hotline number is provided on the Town website and advertised in the flyer discussed in BMP 1B. No calls were received during the permit year.	Calls will continue to be tracked with records of follow-up actions. Explore ways to further promote the stormwater hotline.
Revised		Local Emergency Planner		Currently, most stormwater-related calls go through the Fire Department or Dept. of Public Works.	
2B	Mark Storm Drains with Buttons or Stencils	DPW and Volunteers	50% of storm drains marked by year 5 with door hangers placed in associated neighborhoods.	Volunteer recruitment was successful in year 6 through the Eagle Scouts. The volunteers for this project marked 300 storm drains during Fall 2008, in addition to the 1,000 storm drains marked during Permit Year 5. The marking effort focused on the coastline at the Crow Point and Gold Hill areas. Approximately 26% of the Town's storm drains have been marked to date.	Continue to work with Eagle Scouts to mark additional storm drains in Town.
Revised		Conservation Commission	Downtown area marked		
2C	Develop and Implement a Native Tree/Shrub Planting Program	DPW, Conservation Commission, and Volunteers	Record the number, location, and kind of tree or shrub planted.	The Town of Hingham continued its tree/shrub replanting program as funds were available.	Continue existing practices for tree/shrub replacement as budget allows. Solicit volunteers to participate in future planting programs for stormwater and environmental restoration projects.
Revised					

2a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
2D	Perform Wetland and Waterbody Cleanups	DPW, Conservation Commission, and Volunteers	Track areas cleaned within the Town, amount of debris removed	Volunteers performed a wetlands cleanup in the vicinity of Fee Pond. Trash and other debris were removed from the area.	Continue to work with volunteers to perform cleanup activities. Encourage residents to clean up areas abutting their property
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3A	Hold Annual Household Hazardous Waste Collections	DPW	Document quantity of wastes collected annually.	A collection event was held on May 15, 2008 and the Town of Hingham participates in regional collections as part of the South Shore Recycling Cooperative. A total of 319 cars were recorded for the May 2008 event. Residents can exchange mercury thermometers for digital thermometers at the DPW.	The annual collection event is scheduled for May 16, 2009. Continue participation in the South Shore Recycling Cooperative.
Revised					
3B	Develop Primary Town Storm Drain System Map	DPW	70% of system mapped on GIS.	70% of the drainage system was mapped on GIS in permit year 1.	No further action is planned at this time.
Revised					
3C	Complete Mapping of Stormwater Outfalls	DPW and Contractor	All outfalls mapped by year 4.	All outfall locations were field verified during Permit Year 5. The total number of outfalls remains at 329. The Town is pursuing funding for additional outfall investigations and mapping efforts.	Update the outfall base map as needed and based on new drainage systems.
Revised			75% of outfalls mapped by end of year 4. Source identified and removed within one year.		
3D	Evaluate Stormwater Discharges to Historic Places	DPW, Conservation Commission, and Contractor	Final list of historic places in Hingham. Results of evaluation.	This BMP was completed in June 2005.	No further action is needed.
Revised					
3E	Develop Illicit Discharge Prohibition Bylaw	Board of Health	Obtain authorization to control inputs to the municipal drainage system. Bylaw at Town meeting by end of year 2.	No significant progress occurred.	A draft bylaw will be developed and presented to Town counsel and eventually Town meeting.
Revised		Conservation Commission	Draft bylaw at end of year 4.		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3F	Develop Illicit Discharge Detection and Elimination (IDDE) Plan and Implement Activities	DPW and Board of Health	All outfalls examined by year 4. Sources traced and results documented within one year of discovery.	All outfall locations were field verified and screened for illicit discharges during Permit Year 5. The total number of outfalls remains at 329. The Town is pursuing the removal of identified illicit discharges and funding for additional outfall investigations.	The Town will continue field inspections of stormwater outfalls and pursue the removal of identified illicit discharges.
Revised			75% of outfalls examined by year 4.		
3G	Incorporate Information on Illicit Discharges into Public Education and Outreach Topics	DPW and Board of Health	Copies of materials.	Illicit discharge informational flyers were distributed through the Conservation Commission. The hotline phone number was added to the stormwater website.	Continue distributing illicit discharge information in flyers, meetings and press releases and incorporating materials into public education and outreach topics and activities (BMPs 1A through 1F).
Revised			# materials distributed.		
3H	Setup and Advertise a Hotline for Illicit Discharges	DPW, Fire Department, and Board of Health	Log of complaints and actions taken.	An Illicit Stormwater Discharge Hotline number was established by the Local Emergency Planner in Permit Year 2 (refer to BMP 2A). No complaints were received regarding illicit discharges. Currently, most stormwater-related calls go through the Fire Department or Dept. of Public Works.	Calls will continue to be tracked with records of follow-up actions. Pursue ways to advertise the hotline in coordination with BMP 1B.
Revised		Local Emergency Planner			

3a. Additions – None 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 6	Planned Activities – Next Permit Term
4A	Develop Erosion Control Bylaw	Planning Board	Bylaw at Town meeting by end of year 2.	The Planning Board addressed stormwater management through modifications to existing regulations rather than the development of new Stormwater and BMP By-Laws. LID principles and practices were incorporated into the Subdivision Regulations and the off-street parking regulations of the Zoning By-Law. These changes were adopted at the 2008 Town Meeting.	Enforce LID techniques previously incorporated into the Subdivision Regulations. Explore additional erosion control enforcement measures as needed.
Revised		Conservation Commission	Draft bylaw end of year 4.		
4B	Establish a Procedure for the Receipt of Information Submitted by the Public	Planning Board and DPW	Record number of phone calls to hotline, copies of articles.	Complaints regarding construction site erosion are handled by the Conservation Commission, DPW and Planning Board, as appropriate. No calls were received by the stormwater hotline.	Coordinate record keeping program with regulatory updates, track calls and records of enforcement.
Revised		Conservation Commission			
4C	Conduct Inspections for Erosion Controls	Planning Board, DPW and Consultant	Inspection checklist and documented inspections.	The various departments coordinate efforts to oversee sites and issues are handled by the most appropriate enforcement agent ² . An inspection checklist is in use to document inspections and corrective actions. Inspection activities are ongoing during the construction process by the appropriate department.	Continue inspections in accordance with the existing Zoning Bylaws and updated Planning Board Regulations.
Revised					
<p>²Complaints regarding construction site erosion are received by staff at all of the Land Use Board, including the Conservation Commission, Board of Health, Building Commissioner and Planning Board. Smaller issues are generally handled directly by staff from the department under whose jurisdiction the project was approved (Building, Planning, Health) or the staff with appropriate enforcement authority (Building, Conservation Commission, Health). In an effort to coordinate the Town's response, ongoing issues and more serious complaints are addressed at a weekly coordination meeting held with staff from all of the land use boards. For projects approved by the Planning Board (Subdivisions, Flexible Residential Developments), regular construction site inspections are done by a consulting inspection agent paid for by the developer in accordance with a procedure set forth in the Subdivision Rules and Regulations.</p>					

4a. Additions – None 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 6	Planned Activities – Next Permit Term
5A	Develop BMP Bylaw	Planning Board	Bylaw at Town meeting by end of year 2.	As discussed under BMP 4A, the Planning Board addressed stormwater management through modifications to existing regulations rather than the development of new Stormwater and BMP By-Laws. LID principles and practices were incorporated into the Subdivision Regulations and the off-street parking regulations of the Zoning By-Law. These changes were adopted at the 2008 Town Meeting.	Enforce LID techniques previously incorporated into the Subdivision Regulations.
Revised			Draft bylaw end of year 4.		
5B	Develop and Implement Inspection Program	Planning Board, DPW, Building Inspector, and Consultant	Copies of maintenance reports received annually, plus records of inspections completed and results.	Inspections were conducted by DPW and the Building Inspector for BMPs in Town. Projects approved by the Planning Board which include privately owned and maintained stormwater facilities are required to submit an annual inspection report to the Planning Board. Streets and roadways that are accepted by the Town are inspected regularly by DPW. An inspection checklist is in use to document inspections and corrective actions. Operation and Maintenance (O&M) plans were considered and reviewed.	Continue inspections and document inspections and corrective actions. Coordinate with efforts for BMP 4C.
Revised					

5a. Additions – None 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 6	Planned Activities – Next Permit Term
6A Revised	Clean Catch Basins	DPW	Clean all catch basins.	Continued cleaning catch basins in town twice a year and completing catch basin inspection forms to document maintenance needs. Catch basins draining the DPW Transfer Station were cleaned four or more times a year. Hingham removed a total of 2,700 tons of sediment from all catch basins Town-wide during Permit Year 6.	Continue catch basin cleaning program. Continue recording sediment data for future cleaning priorities, along with outfall evaluation data.
6B Revised	Sweep Streets in Town	DPW	Priority plan of sweepings based on water quality impact. Volume of sweepings collected.	Continued street sweeping program in town that included: swept downtown area daily to biweekly depending upon visual inspection and traffic; swept environmentally sensitive areas 2-3 times annually, and swept the Transfer Station every 1-2 weeks.	Continue street sweeping program annually and evaluate future sweeping priorities. Record and log sediment quantities and when streets are swept. Currently, street sweepings are mixed with compost and reused along non-residential roadways in town.
6C Revised	Develop an Inspection and Maintenance Plan	DPW	Written schedule. Records of inspections and maintenance.	The DPW developed a form for catch basin inspections during Permit year 1 and the form was updated to include information related to potential illicit discharges during Permit Year 5. The Town continued to seek approval for use of the Hingham Landfill for maintenance wastes.	The Hingham landfill closure plan is ongoing. A disposal policy for maintenance generated wastes will be developed prior to the final closure of the Hingham Landfill.
6D Revised	Continue Existing Pollution Prevention and Good Housekeeping Practices at the DPW Facility	DPW	Ensure existing practices are continued.	Continued ongoing practices at the DPW Facility: indoor vehicle maintenance, immediate repair of leaking vehicles, proper handling/ storing and disposing of hazardous materials and wastes, covered salt storage and indoor vehicle washing.	Continue existing practices and inform new employees of pollution prevention and good housekeeping practices. Transfer these practices to the new DPW facility beginning in Spring of 2009 during the next permit year.
6E Revised	Ensure Proper Cleaning of Vehicle Leaks at the DPW Facility	DPW	No significant vehicle leak stains at the facility.	Vehicle leaks were cleaned promptly at the facility.	Continue to ensure proper cleaning of leaks. Transfer these practices to the new DPW facility.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6F Revised	Rinse Vehicles Indoors at the DPW Facility	DPW	Record of memo.	Vehicle rinsing was conducted indoors to the best extent practicable and proper vehicle rinsing and washing activities were discussed at regular DPW meetings.	Continue proper rinsing activities and continue to include vehicle rinsing procedures in the employee training program or during staff meetings, as needed. Transfer these practices to the new DPW facility.
6G Revised	Divert Stormwater Runoff Away From the White Building at the DPW Facility	DPW	Record of before and after photos.	This task was completed in Permit Year 3.	No further action is needed.
6H Revised	Ensure Covered Storage for Salt Materials at the DPW Stockyard	DPW	All salt is covered.	All salt materials were covered.	Continue covering salt materials. Transfer these practices to the new DPW facility and utilize the new salt storage shed.
6I Revised	Improve Covering and Evaluate BMP's for the Sand/Salt Pile at the DPW Stockyard	DPW	No rain contact with pile. No significant runoff contact with pile.	Tarps were maintained to cover the existing sand/salt pile and the area around the pile was periodically swept to contain the pile, minimize runoff contact and the migration of sediments. The Town completed construction of the new DPW facility that includes a sand/salt storage shed and is currently awaiting a certificate of occupancy. The DPW expects to move into the new building by the end of May 2009.	Continue sweeping practices to prevent runoff from the existing salt/sand pile. Utilize the new storage shed for all activities as soon as possible. Salt and sand will be transferred from the existing storage facility to the new shed. Currently there are approximately 200 tons in the new shed.
6J Revised	Construct Berms at the DPW Stockyard to Contain Earth Materials	DPW	Berms constructed. Before and after photos.	Earth berms and BMPs were maintained to prevent off-site migration of earth materials.	Continue to maintain earth berms and BMPs as needed to prevent sediment migration from the site.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6K	Disconnect Floor Drains and Prohibit Vehicle Washing at the Tree & Park Barn Facility	DPW	Floor drains disconnected as shown by closure records. Record of memo.	Continued prohibiting vehicle washing and equipment storage inside the building to ensure wastes were not disposed to the floor drains. Rubber covers were used to prevent materials from entering drains.	The Town plans to properly close floor drains at the facility in accordance with DEP requirements once the Tree and Park Department moves to its new facility and the building is vacated by the end of May 2009.
Revised					
6L	Prevent Stormwater Contact with Vehicle Leaks and Maintenance Areas at the Recycling Facility	DPW	No significant vehicle leak stains at the site.	Vehicles and equipment were maintained at the DPW Facility indoors and only light maintenance activities occurred at the Recycling Facility. This BMP is also being addressed as part of the facility's SWPPP.	Continue to prevent vehicle leak stains and repair leaking vehicles promptly.
Revised					
6M	Store Batteries Under Cover at the Recycling Facility	DPW	No uncovered outdoor storage of batteries.	Batteries were stored indoors.	Continue storing batteries indoors.
Revised					
6N	Comply with DEP Policy for Vehicle Washing at the Recycling Facility	DPW	Record of memo.	Outdoor vehicle washing and rinsing was prohibited.	Continue to prohibit outdoor vehicle washing.
Revised					
6O	Prevent Stormwater Discharges from Recycling Bales and Loading/Unloading Areas at the Recycling Facility	DPW	No contact with plastic bales and no stormwater discharges from the unloading area.	Plastic bales were stored in a covered roll off container. The bale unloading area was swept on a regular basis to remove debris and drips.	Continue to sweep and clean (using dry methods) the bale unloading area on a regular basis to remove debris and drips.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6P	Conduct a Feasibility Study For the Trash Trailer Bays at the Transfer Station	DPW	Copy of the feasibility study report. Plans or sketches.	The trailer bays were cleaned on a regular basis to minimize stormwater contact with debris. Dry cleaning methods such as sweeping were used where possible. Coverings for the trailers are not cost effective at this time and funds were allocated toward landfill capping. The Town is in the process of closing the landfill. Progress has been made towards finalizing the landfill closure plan.	Continue cleaning procedures at the trash trailer bays to prevent stormwater contact. Address the landfill leachate problem as part of landfill closure activities, which will begin following approval.
Revised	Address Landfill Leachate Entering the Drainage System		Trash trailer bay cover installation, landfill closure.		
6Q	Continue Existing Pollution Prevention and Good Housekeeping Practices at the Bus Depot	School Department and Contractor	Ensure existing practices are continued.	Continued the following pollution prevention practices at the Bus Depot: indoor vehicle maintenance for School Department vehicles; and bus washing using a collection system for off-site disposal of wash water.	Continue existing practices.
Revised					
6R	Modify Downspout Discharges at the Fueling Station	School Department and DPW	Downspout discharges modified as shown by before and after photos.	The downspouts were modified to divert stormwater away from the fueling area in Permit Year 3.	No further action is needed.
Revised					
6S	Install a Spill Kit at the Fueling Station	School Department	Spill kit installed. Record of memo.	The spill kit was maintained at the station with a memo posted to describe the kit and its location.	Ensure kit is fully stocked with spill materials and memo remains posted.
Revised					
6T	Ensure Compliance for Floor Drain Systems in the Bus Depot Building	School Department	Record of inspections and changes to floor drain systems, if any.	DPW has notified the School Department of the improper floor drain connections.	Explore options for abandoning floor drains.
Revised					
6U	Continue Existing Facility Practices at the Town Hall and Building #104	Police Department and Department of Public Works	Ensure existing practices are continued.	Continued practices at the Town Hall for washing police vehicles off-site at an approved facility and at Building #104 for indoor storage of DPW vehicles and equipment.	Continue existing practices.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6V	Ensure Compliance for Floor Drains at the North Fire Station	Fire Department	Sketches or inspection memos.	DPW has notified the Fire Department of the improper floor drain connections.	Explore options for abandoning floor drains.
Revised					
6W	Ensure Compliance for Floor Drains and Vehicle Washing Activities at the Central Fire Station	Fire Department	Sketches or inspection memos. Record of memo.	The new construction at the Central Fire Station was completed and the floor drains are connected to the sanitary sewer system for proper disposal of vehicle washing wastes.	Continue proper vehicle washing practices once construction is complete.
Revised					
6X	Evaluate Alternative Vehicle Washing Options at the Hingham Light Plant	Light Plant	New methods for handling vehicle wash water at the site by the end of year 2.	DPW has notified the Hingham Municipal Lighting Plant about ways to properly address vehicle washing activities.	Prohibit outdoor vehicle washing and post employee memo for appropriate vehicle washing. Evaluate and implement alternative washing methods.
Revised			End of year 3.		
6Y	Use IPM Program for Application of Pesticides in Town	DPW	Copy of IPM Program.	Continued practice of IPM program.	Continue existing practices and continue to document protocols.
Revised					
6Z	Use Licensed Applicators for Fertilizers and Pesticides in Town	DPW	Record quantities of fertilizers and pesticides purchased annually.	2,400 pounds of fertilizers were purchased in Permit Year 6. 4.2 pounds of rodent control poison were purchased for use at the Transfer Station. Town did not purchase any herbicides. Chemical applications were minimized. Licenses were maintained for all Town employees that apply chemicals.	Continue existing practices and record quantities applied annually. Explore ways to reduce fertilizer use, especially in environmentally sensitive areas.
Revised					
6AA	Calibrate Salt Spreading Equipment	DPW	Record quantity of salt purchased annually.	1,500 gallons of Ice-Ban was used to enhance the effectiveness of deicing operations. Salt spreading equipment was calibrated to ensure proper application rates.	Continue to calibrate salt equipment and track salt/Ice-Ban purchases. Continue to maintain copies of records with the Stormwater Management Plan and periodically evaluate salt use and reduction effectiveness.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6AB	Use Low Salt Applications at Designated Areas	DPW	Document application rate in Accord Pond watershed compared to other watersheds.	Low salt applications were used in the Accord Pond watershed for water supply protection, which includes the following streets: Gardner St., Mallard Run, Winfield Rd., Accord Pond Dr., Devon Terrace, Farm Hills Rd., Peter Hobard Rd, Hazelwood Dr. and Harvest Lane. The new DPW facility includes a covered building that may eliminate the need to mix salt with sand to prevent freezing. This may reduce the low salt application to “no salt” application.	Continue existing practices and compare application to other watersheds.
Revised					
6AC	Ensure Proper Waste Disposal in Town for Hazardous and Special Wastes	DPW	Document quantity of wastes collected annually.	Tracking continued for special and regulated wastes (e.g., waste oil, batteries, light tubes, CRTs, electronic equipment) at the Hingham Transfer Station. The following amounts of materials were collected in during Permit Year 6: Oil – 3,750 gallons Batteries – 319 units Fluorescent Light Tubes – 21,051 L.F. Mercury-containing devices – 197 units TV’s – 2,047 units Monitors – 1,356 units	Continue existing practices at the Hingham Transfer Station for the collection of special and regulated wastes and document results over time. Continue to offer Household Hazardous Waste Collections annually and track town participation and quantities collected, if possible.
Revised					
6AD	Ensure Compliance for Snow Disposal in Town	DPW	Utilize designated snow disposal location.	Snow storage and disposal was conducted at the Town bathing beach parking lot. The buffer areas were cleaned by hand in the spring to remove accumulated materials. The parking lot is designed with vegetative buffers and sediment traps to filter snowmelt from the parking lot, before draining to the Hingham Harbor.	Continue existing practices of snow disposal to ensure surface water quality protection.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6AE	Ensure Water Quality Improvements are Considered for Flood Projects.	DPW	Records of flood control projects.	The Town Engineer met with MADEP to coordinate on the tide gate project. It is currently on hold. The tide gate was purchased in 2007 and it is awaiting installation by a contractor. The tide gate will address tidal and surcharge impacts that exacerbate flooding conditions during wet conditions in the downtown area.	Install tide gate as part of the Commuter Rail project to address tidal and surcharge impacts. Develop a review program or standard operating procedure (SOP) through DPW for new flood projects to ensure that water quality improvements are considered.
Revised					
6AF	Conduct Town Employee Stormwater Training	DPW	Attendance sheet and copy of program	Pollution prevention topics were informally discussed as part of routine DPW operations meetings. Transfer Station employees received informal, on-site stormwater training.	Conduct SPCC refresher training in Spring/Sumer 2008.
Revised					

6a. Four Additions at this time

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6AG	Develop and Implement a SPCC Plan at the Transfer Station	DPW	Copy of SPCC Plan & inspection records	A SPCC Plan was developed and implemented at the Transfer Station in Permit Year 5 to address aboveground oil storage. Measures to prevent and protect against an oil release were implemented.	Continue complying with the SPCC Plan.
Revised					
6AH	Conduct biannual inspections of solid waste at Transfer Station in accordance with SPCC Plan and SWPPP.	DPW	Copy of SPCC Plan & inspection records	Solid waste operations at the Transfer Station were inspected by an engineer twice in year 6 in accordance with the SPCC Plan, SWPPP and DEP Solid Waste Regulations. DPW performs ongoing inspections as part of its routine operations.	Continue the engineer's biannual inspections for solid waste at the Transfer Station. Continue ongoing inspections by the DPW.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6	Planned Activities – Next Permit Term
6AI	Ensure Compliance for Floor Drains at the Transfer Station	DPW	Sketches or inspection memos.	The DPW developed an approved options to handle future floor drains discharges at the site.	Continue to explore options for proper floor drain connections. The existing leaching area will be tested and closed out during Spring 2009. An industrial wastewater holding tank will be installed in July 2009.
Revised					
6AJ	Update SWPPP for the Hingham Recycling & Trash Transfer Facility	DPW and Consultant	Updated SWPPP & coverage under the MSGP	Hingham updated the existing SWPPP to meet the requirements of the reissued Multi-Sector General Permit (MSGP) and obtained permit coverage.	Continue to comply with the SWPPP. Update as necessary.
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 6	Planned Activities – Next Permit Term
7A	Develop a Water Quality Strategy for 303d Waters	DPW, Conservation Commission, and Consultant	Summary of pollution prevention efforts, future needs, and responsible parties. Copy of Surface Water Quality Strategic Plan.	The Town continued with implementation of the existing SWMP to address impaired waters.	Review impaired water list and TMDLs as they are developed, along with information collected as part of the Phase II Stormwater Program and upcoming Phase II permit requirements to develop a water quality strategy to address impaired waters in Town.
Revised					
7B	Implement BMP's from Water Quality Strategy	DPW, Conservation Commission, and Consultant	Photographs, logs, and BMP descriptions for completed efforts and water quality improvements.	This will commence upon developing a water quality strategy.	This will commence upon developing a water quality strategy, based on available resources and funds for implementation.
Revised					

7b. WLA Assessment

The Town of Hingham has several 303d listed waters that are classified as Category 5 “Waters Requiring a TMDL”. Water quality concerns associated with 303d waters will be addressed through the implementation of BMPs under the six minimum measures for Phase II, as outlined in the Hingham Stormwater Management Plan (SWMP). 303d waters are highlighted in the Hingham SWMP as a priority for implementation activities throughout the permit term. The WLA Assessment will be addressed as part of the Town’s SWMP, as TMDL studies are completed for 303d waters in Hingham or those water bodies with watersheds in Hingham.

Part IV. Summary of Information Collected and Analyzed

All outfall locations were field verified and screened for illicit discharges during Permit Year 5. A total of 329 outfalls have been inspected to date. The Town is still pursuing funding for additional outfall investigations related to the three potential illicit discharges identified during previous inspections.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	319 cars
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	No

Legal/Regulatory

In Place
Prior to
Phase II Under
Review Drafted 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

* LID principles and practices were incorporated into the Subdivision Regulations and the off-street parking regulations of the Zoning By-Law and adopted at the 2008 Town Meeting. The Town previously updated its subdivision and site plan requirements to address Phase II requirements in Permit Year 1.

Mapping and Illicit Discharges

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	329 known
System-Wide mapping complete	(%)	80%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	329*
Illicit discharges identified	(#)	3
Illicit connections removed	(#) (est. gpd)	0
% of <u>properties</u> on sewer	(%)	33%
% of <u>properties</u> on septic systems	(%)	67%
*The Hingham DPW inspects stormwater outfalls on an annual basis for drainage and erosion problems and has developed an inspection form for drainage structures and outfalls.		

Construction

Number of construction starts (>1-acre)	(#)	
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	(%)	Not Assessed
Site inspections completed	(# or %)	Multiple
Estimated volume of stormwater recharged	(gpy)	Not Assessed

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)	1-2/yr ¹
Total number of structures cleaned	(#)	2,500
Storm drain cleaned	(LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	2,700 tons ²
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	N/A
<p>1. Some drainage structures in the downtown area are cleaned more frequently based on the rate of sediment accumulation and historical flooding issues.</p> <p>2. Approximately 2,700 tons of catch basins cleanings and street sweepings are collected each year. Estimates for each activity are not available at this time.</p>		

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)	Varies ¹
Qty. of sand/debris collected by sweeping	(lbs. or tons)	2,700 tons ²
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	2 owned
Vacuum street sweepers specified in contracts	(y/n)	N/A
1. The downtown area is typically swept 8-10 times each year, but was swept daily due to ongoing roadway construction. Environmentally sensitive areas, such as the roads near Accord Pond (surface drinking water supply), are swept 2-3 times each year.		
2. Approximately 2,700 tons of catch basins cleanings and street sweepings are collected each year. Estimates for each activity are not available at this time.		

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	N/A
<i>The DPW performs routine inspections of town-maintained lands for pests to determine the appropriateness of chemical applications for shade trees and Town-owned lands. Chemical applications are minimized to the best extent possible and Pesticides are applied only when necessary by a Tree and Park Department licensed pesticide applicator.</i>		

Anti-/De-Icing products and ratios: <i>Ice-Ban (MgCl₂) is applied to a 75:25 sand/salt mixture with a sprayer as the materials are dispensed from trucks during de-icing activities. This salt catalyst has replaced the liquid sodium chloride that was applied in the past. As a result, the Hingham DPW has observed improvements in shade tree conditions along streets. On some occasions, straight salt applications are used in town.</i>	% NaCl % CaCl ₂ % MgCl ₂ % Sand	
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Zero Velocity
Estimated net reduction in typical year salt application	(lbs. or %)	Not Assessed
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	Yes ¹
1. The Town began construction of the new DPW facility that includes a sand/salt storage shed.		