Municipality/Organization: Town of Milford, MA

Permit Number: MAR041135

Annual Report Number & Reporting Period: No. 3: March 05-March 06

NPDES Phase II Small MS4 General Permit
Annual Report

Part I. General Information

Contact Person: Shelly A. Leclaire Title: Highway Surveyor
Telephone #: 508-473-1274 Email: Highway@MilfordMa.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: Shelly A. Leclaire
Title: Highway Surveyor
Date: April 3, 2006
Part II. Self-Assessment

The Town of Milford has completed the required self-assessment and has determined that our municipality is in compliance with the permit conditions. Discussions of the progress on BMPs toward the measurable goals, as well as quantification of some of the programs, are included in the following sections. A description of how the BMPs reduce pollutants of concern is also included.

Public Education and Outreach
Milford has met the goals of the BMPs in this category and will continue to provide public education in the form of presentations, expansion of collection of stormwater materials in the local library and other Town venues (schools, Town Hall), and postings on the Town website. Materials that have been distributed to date, as well as presentations given to 8th graders in the Town, have provided a general description of what stormwater is and how it is conveyed, while stressing important key areas such as the prevention of littering and dumping, the importance of picking up pet waste and not feeding waterfowl, and the responsible use of fertilizers and disposal of yard waste in order to reduce pathogen contamination and nutrient loading (pollutants of concern) to waterbodies in Town. Dumping, waterfowl wastes, and improper yard waste disposal have been water quality issues observed in the Town.

Public Involvement and Participation
Annual clean-ups, scrap metal and used motor oil recycling, and semi-annual hazardous waste pickup days are ongoing programs to fulfill this component. These programs encourage the proper disposal of materials that might otherwise contribute metals, a pollutant of concern, and other pollutants to Town waterbodies. Public meetings held for the recently approved stormwater management bylaw, as well as for appropriation of funds for BMP retrofit on Milford Pond and maintenance of Godfrey and O’Brien Brook channels have provided other public involvement opportunities related to stormwater.

Illicit Discharge Detection and Elimination (IDDE)
Prior to the implementation of the NPDES MS4 program, the Town of Milford had no comprehensive storm sewer system mapping. By August of 2004, a map showing the location of all outfalls in the Town and the names of all waters that receive discharges from those outfalls had been developed to satisfy BMP ID#IDD1 (storm sewer map). This map includes approximately 300 outfalls which were located by field survey. An “Illicit Discharge Detection Plan” was developed by the Town’s consultant in August of 2004. The plan presents background information and required actions for locating priority areas, tracing the source of an illicit discharge, removing the source of an illicit discharge, and program evaluation and assessment, prepared in accordance with “Illicit Discharge Detection and Elimination Manual: A Handbook for Municipalities” (New England Interstate Water Pollution Control Commission, 2003) and “Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: A User’s Guide” (US EPA, 1993).

Based on the “Illicit Discharge and Detection Plan”, dry-weather field screening and water quality testing of outfalls observed to be flowing was conducted on outfalls within the Town, such that each outfall in the Town has been inspected at least once during dry
weather (3 prior days with rainfall ≤ 0.1 inches). At each outfall, the size, material, approximate flow (if flowing), the presence of floatables, debris, coarse solids, color, turbidity, oil sheen, odor, staining, corrosion, abnormal amounts of vegetation, and structural integrity were noted. Samples collected from flowing outfalls were analyzed for specific conductance, ammonia nitrogen, temperature, pH and detergents. Testing for pathogens (fecal coliform) was not conducted, as it is more expensive and not well suited for rapid screening. However, ammonia and detergents were selected as parameters to identify potential wastewater contamination which would contribute pathogens (a pollutant of concern). This work, which required over 100 hours of labor over the course of a year (11/04 – 10/05), provided the most rapid screening for illicit discharges possible under the current available mapping (outfalls only), funding and time constraints. The results of this screening were used to develop criteria to rank the outfalls into priority levels for further investigation.

Four outfalls were assigned to Priority Level 1, with a goal to trace and remove the sources of illicit discharges as soon as possible. Funding of $25,000 for this work was appropriated at Town Meeting in the Fall of 2005. The “Illicit Discharge and Detection Plan” recommended tracing dry-weather flows upstream along the storm sewer system during dry weather and using dye or smoke testing to trace the ultimate source. This method is suitable for unmapped storm sewer systems. However, in light of recent communication with EPA, Milford will use the Charles River Illicit Discharge Detection & Elimination Protocol (“top-down approach”) to trace the sources of illicit discharges for high priority outfalls as the current funding of $25,000 allows. In order to do this, Milford must map the complete storm sewer system of each outfall to be evaluated.

To make best use of the funding currently available, storm sewer systems associated with Priority Level 1 outfalls will be mapped completely using GPS, and then the “top-down approach” will be conducted for these systems. This first round of mapping and testing will allow Milford to assess how much funding may be required for future efforts in the IDDE program. Outfalls under Priority Level 2 will also require tracing and removal of illicit discharges after Priority Level 1 outfalls have been completed. Any remaining funding will be used for this purpose and more funding will be appropriated as needed. Outfalls under Priority Level 3 must be revisited during dry weather and re-sampled to confirm the absence of potential illicit discharges. No further action for outfalls under Priority Levels 4 and 5 is planned at this time, as these outfalls either were not flowing during dry weather or did not exhibit any physical or water quality indicators suggesting an illicit discharge. It is important to note that these Priority Levels were developed based on relative levels within the Town and not on absolute threshold values, in order to prioritize outfalls for further investigation so that limited funding and resources will be spent wisely.

As of March 16, all four Priority Level 1 outfall storm sewer systems have been mapped, and planning for the “top-down approach” on these systems has commenced. The ultimate goal of the Town is to find and remove all illicit connections. Some reduction in pollutants of concern, including pathogens as well as nutrients, in the waterbodies of the Town will result from the removal of illicit connections. The extent of the reduction will depend on the number and severity of illicit connections removed and how the contribution of pathogens from illicit connections compares to that from waterfowl.
In addition to the stormwater IDDE program, the Milford Sewer Department has been and is continually detecting and removing illegal cross connections and making repairs to the sanitary sewer system. Between 1995 and 2000, over 15 cross-connections have been removed and repairs of broken pipes and leaking manholes have been conducted. To date, approximately 63,500 gpd of sewage leakage has been eliminated. During the fall of 2005, the Milford Sewer Department repaired a portion of the sewer system on Vine Street which had been overflowing during rain events and discharging raw sewage via overland flow directly to Godfrey Brook. This repair will have a significant positive impact on water quality in Godfrey Brook and downstream resources.

The Milford Stormwater Management By-Law was approved at Town Meeting in October 2005 and has been approved by the Attorney General’s Office. The By-Law includes provisions for the prohibition of illegal discharges and illicit connections, as well as improper waste disposal. The prohibition of illicit connections includes connections made in the past “regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection”. The By-Law includes procedures for enforcement and penalties.

The Town has stenciled the message, “Dump No Waste – Drains to Stream” on every catch basin in the Town over this past permit year, which constituted an expense of $4,400 and 464 manhours.

Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management in New Development and Redevelopment

The Milford Stormwater Management By-Law, which is now fully in place, contains provisions to satisfy the BMPs under these minimum control measures. The By-Law applies to all flows entering the MS4 generated on any developed and undeveloped lands within the Town, and requires approval of a stormwater management permit prior to the issuance of any building permit for development with construction activities disturbing greater than one acre. Application for the permit includes development of a Stormwater Management and Erosion and Sediment Control Plan, as well as an Operation, Maintenance, and Inspection Agreement for BMPs to be constructed on-site. Violation of the By-Law may result in “stop work orders”, criminal and civil penalties, or holds on occupancy permits. Controls on construction site stormwater runoff and the requirement for post-construction stormwater management will minimize the transport of pollutants of concern, sediment, nutrients, and metals to Town waterbodies.

The Town’s existing Zoning By-Law includes requirements for minimum open space in over half of its zoning districts, specified in either square feet per dwelling unit or percent of lot area. At least 50% of the total lot area must be designated as open space in Planned Residential Developments.

Pollution Prevention and Good Housekeeping in Municipal Operations

Twice yearly street sweeping and annual catch basin cleaning are regular BMPs that reduce the amount of sediments entering waterbodies. Nutrients, toxic chemicals, and various metals may sorb to sediment particles, thus removal of sediments also results in a
reduction in these other pollutants, which include pollutants of concern. In addition, pathogens from any pet waste that may be accumulated in catch basins are prevented from reaching waterbodies. The annual lawn waste/leaf collection program also prevents a significant loading of nutrients to town waterbodies, by reducing the amount of these wastes that can contact waterbodies.

The Town approved $50,000 on 2/13/06 for the planning, design and permitting of retrofit BMPs for outfalls discharging to Milford Pond. These BMPs will likely include some combination of swirl concentrators, sediment forebays, and deep sump catch basin retrofits and will result in the reduction of sediments and nutrients (pollutants of concern) entering Milford Pond. The installation of these BMPs is a condition of the Army Corps of Engineers participation in the Aquatic Habitat Restoration of Milford Pond, an $8.3 million project. Milford’s share of the total project cost is $3.8 million, including $500,000 for the BMP design, permitting and construction. The Aquatic Habitat Restoration program will include the dredging of about 45 acres of Milford Pond, expected to occur 2007 – 2008. The dredging project is currently under design by the Army Corps of Engineers. At this time, the Town is pursuing endangered species impact review with the Massachusetts Natural Heritage Program, MEPA review, and other necessary permitting. Today, Milford Pond is extremely shallow with an average depth of less than 2 feet, with nutrient rich sediments that create eutrophication and support the growth of dense communities of aquatic macrophytes. Anoxic conditions occur in the summer months due to the decomposition of organic matter. A 45± acre portion of the pond will be dredged to a maximum depth of 12 feet, resulting in a decrease in aquatic macrophyte growth within a portion of the pond and providing and enhancing deep, open water habitat that would help to restore dissolved oxygen levels and improve overall water quality. Both noxious aquatic plants and low dissolved oxygen are pollutants of concern and this restoration is likely to result in significant improvements in these areas. The BMPs installed on outfalls into Milford Pond will prevent additional sediments from re-filling the pond. The improvements to Milford Pond will likely have a positive downstream impact.

The stone masonry channelized sections of Godfrey and O’Brien Brooks require annual repair of damage to the stone walls resulting from high flows and regular wear and tear due to age. These damaged sections may contribute to periodic episodes of sediment loading from erosion. The Town has recently contracted with a consultant to prepare a feasibility study for the repair and long term maintenance of these channels, in an effort to more efficiently manage town resources and improve these stream corridors.
### Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE1</td>
<td>Brochures to educate public about stormwater pollution, pollution prevention, importance of reporting illicit dumping</td>
<td>Highway Dept.</td>
<td>Develop brochures in Permit Year (PY) 1. Produce and mail to residents in PY2.</td>
<td>Brochures distributed during PY2. Approximate volume of material removed from catch basins: PY2: 2,400 cubic yards (1598 tons of road sand were purchased by the Town during the previous winter season) PY3: 2,460 cubic yards (2710 tons of road sand were purchased by the Town during the previous winter season)</td>
<td>Monitor goal of reduction in pollutants in catch basins, observed by catch basin cleaning crews.</td>
</tr>
<tr>
<td></td>
<td><strong>Revised</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE2</td>
<td>Brochures to educate business/industry regarding pollution prevention, material storage and handling, housekeeping, disposal practices</td>
<td>Highway Dept.</td>
<td>Develop brochure in PY1. Produce and mail to businesses in PY2.</td>
<td>Brochures distributed during PY2. Approximate volume of material removed from catch basins: PY2: 2,400 cubic yards (1598 tons of road sand were purchased by the Town during the previous winter season) PY3: 2,460 cubic yards (2710 tons of road sand were purchased by the Town during the previous winter season)</td>
<td>Monitor goal of reduction in pollutants in catch basins, observed by catch basin cleaning crews.</td>
</tr>
<tr>
<td></td>
<td><strong>Revised</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE3</td>
<td>Outreach program for local students, civic groups</td>
<td>Highway Dept.</td>
<td>Organize and implement round of presentations for local schools and at least one civic group</td>
<td>Consultant performed stormwater education PowerPoint presentation to all Milford 8th graders, approximately 350 students, on January 27, 2006, at Milford Middle School East, 45 Main Street, at approximate cost of $2,570.</td>
<td>Organize and conduct at least one round of presentations to a civic group.</td>
</tr>
</tbody>
</table>
## 1. Public Education and Outreach cont'd.

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) — Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE4</td>
<td>Educational material in library</td>
<td>Highway Dept.</td>
<td>Organize a group of materials regarding stormwater pollution and make available at library.</td>
<td>USGS “Water Quality…Potential Sources of Pollution” poster (10 copies); EPA “Take the Stormwater Runoff Challenge” cross-word puzzle placemat; EPA fact sheet — “Protecting Water Quality from Urban Runoff”; EPA “Stormwater and the Construction Industry” poster (10 copies): Materials distributed to Milford Schools (Middle School East, Stacy, Memorial, High School, Woodland, and Brookside), as well as Town Library, Wastewater Treatment Plant, Milford Water Co., Town Hall, and Highway Department. Electronic files of these materials programmed into Town of Milford website as of February 2006.</td>
<td>Add to and update collection of materials.</td>
</tr>
<tr>
<td>Revised</td>
<td>Educational materials in Town Hall and other locations</td>
<td>Highway Dept.</td>
<td>Hang posters and have materials available in Town Hall.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 2. Public Involvement and Participation

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP1</td>
<td>Community cleanup</td>
<td>Highway Dept.</td>
<td>Form volunteer group for annual cleanup. Hold cleanup day and record participants.</td>
<td>Cleanup conducted in 2005 and early 2006 by inmate community service group to pick up litter, and clear brush and debris from local brooks, as follows:</td>
<td>Continue annual cleanup days to reduce amount of debris/trash along waterways and roadways. The Girl Scouts were contacted regarding scheduling an Earth Day cleanup for 2006.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Date</strong></td>
<td><strong>Location</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May 16, 17, 18, June 7, 8</td>
<td>Central Street Beaver Street Maple Street Cedar Street Dilla Street Sumner St. Countryside Dr. Fino Field Bridge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>June 9</td>
<td>Water St. @ Godfrey Brk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>June 23</td>
<td>Front St. @ Highway Dept.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>July 5</td>
<td>Cedar Swamp Dam Lawrence St.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>July 12</td>
<td>Vine St. @ Godfrey Brk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>July 15</td>
<td>East Main St. parking lot</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>November 11</td>
<td>South Main St. @ Godfrey Brk</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>March 20-25</td>
<td>Beaver St., Maple St., Dilla St., Birch St., Cedar St., Sumner St., Countryside Dr., Asylum St., Fiske Mill Rd.</td>
</tr>
</tbody>
</table>

**Revised**
2. Public Involvement and Participation cont’d.

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP2</td>
<td>Scrap metal and used motor oil recycling</td>
<td>Highway Dept.</td>
<td>Continue to offer recycling program. Record amount of material collected.</td>
<td>Program is ongoing and maintained by the Board of Health. 2,135 gallons of automotive motor oil collected during calendar year 2005 (increase from 2,000 gal collected in 2004). 1559 tons of materials recycled in Calendar Year 2005, including 529 tons of scrap metal/white goods.</td>
<td>Continue to offer program and record amounts of materials collected.</td>
</tr>
<tr>
<td>PP3</td>
<td>Hazardous waste dropoff days</td>
<td>Highway Dept.</td>
<td>Continue to offer semi-annual dropoff program and record amount of material collected.</td>
<td>Program is ongoing and maintained by the Board of Health.</td>
<td>Continue to offer dropoff program and record amount of material collected.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>CY 2004</th>
<th>CY 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto batteries</td>
<td>388</td>
<td>409</td>
</tr>
<tr>
<td>5-gal pails of household batteries</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>L.f. of fluorescent bulbs</td>
<td>315</td>
<td>285</td>
</tr>
<tr>
<td>C.Y. latex/oil based paint</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Mercury containing devices</td>
<td>1524</td>
<td>1497</td>
</tr>
<tr>
<td>lbs electronics</td>
<td>4100</td>
<td>3779</td>
</tr>
</tbody>
</table>

All materials, except for latex/oil based paint, were collected every Thursday through Saturday. Latex/oil based paint was collected all Saturdays in April through November.
2. Public Involvement and Participation cont’d.

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP4</td>
<td>Public meeting</td>
<td>Highway Dept.</td>
<td>Hold public meeting to present proposed bylaw/ordinances for input prior to implementation by end of PY1.</td>
<td>Stormwater bylaw approved at Town Meeting on October 24, 2005.</td>
<td>Task complete.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td>Public meeting may also discuss stormwater pollution prevention.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


### 3. Illicit Discharge Detection and Elimination

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) — Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDD1</td>
<td>Storm Sewer Map</td>
<td>Highway Dept.</td>
<td>Seek Town Meeting funding in PY1. Complete map in PY2.</td>
<td>Outfall mapping completed by consultant August 2004, at cost of $8,000. A total of 300 outfalls were mapped.</td>
<td>Task complete. Mapping will be reviewed on an annual basis for updates, corrections, deletions, etc.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDD2</td>
<td>IDDE program development, identification of problem areas, correction of issues.</td>
<td>Highway Dept.</td>
<td>Conduct outfall sampling in PY2. Number of illicit discharges to be removed in PY3, 4, 5.</td>
<td>Dry-weather field screening completed by consultant Fall of 2005 and “Dry Weather Outfall Investigation Summary Report” completed November 2005. 303 outfalls were inspected at least once during dry weather (preceding 72 hrs with rainfall &lt; 0.1 in) at a cost of approximately $25,000 and 22 were identified for further investigation. The consultant has been contracted to begin GPS mapping of the complete storm drain systems associated with high priority outfalls and perform EPA protocol (“top-down approach”) for tracing the sources of illicit discharges. $25,000 has been appropriated for this work. The strategy includes complete mapping of Priority 1 systems followed by implementation of “top-down approach” for those systems. Mapping followed by implementation of “top-down approach” will continue for the remainder of the Priority 2 outfalls as funds ($25,000) allow. As of March 16, 2006, the complete storm sewer systems associated with outfalls #153, #148, #69 and #170 have been mapped using GPS and plotted using GIS.</td>
<td>Continue mapping complete storm sewer systems associated with high priority outfalls and implement “top-down approach” for those outfalls.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDD3</td>
<td>IDDE program documentation.</td>
<td>Highway Dept.</td>
<td>Submit annual report, including information on IDDE program steps.</td>
<td>Annual report is hereby submitted.</td>
<td>Future PY annual reports will include information on IDDE program tasks.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3. Illicit Discharge Detection and Elimination cont’d.

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDD4</td>
<td>Storm drain stenciling program, focusing on drains tributary to ponds and known dumping areas. Program extended to brook drains as feasible.</td>
<td>Highway Dept.</td>
<td>Percentage/number of storm drains stenciled annually. Records of catch basin cleaning showing decreased dumping/pollutants in catch basins.</td>
<td>All Town storm drains (approximately 3,079) have been stenciled, using 464 manhours and at a cost of $4,400.</td>
<td>Task complete.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12
## 4. Construction Site Stormwater Runoff Control

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) — Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities — Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR2</td>
<td>Mechanism for site plan review, inspections, review procedures</td>
<td>Highway Dept.</td>
<td>Establishment of procedures and number of plans reviewed annually.</td>
<td>Stormwater Management bylaw approved at Town Meeting on October 24, 2005 includes procedures for review and approval of stormwater permits and inspections. The Stormwater Management bylaw was approved by the Attorney General’s Office in letter dated February 9, 2006.</td>
<td>Implement bylaw.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 5. Post-Construction Stormwater Management in New Development and Redevelopment

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) — Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities — Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCR1</td>
<td>Regulation for BMPs</td>
<td>Highway Dept.</td>
<td>Develop and adopt regulation, measure compliance (# of BMPs, % compliance, etc).</td>
<td>Stormwater Management bylaw approved at Town Meeting on October 24, 2005 includes Stormwater Management Performance Standards and projects are required to meet the Massachusetts Stormwater Management Policy. Accompanying Guidance Document outlines detailed requirements. The Stormwater Management bylaw was approved by the Attorney General’s Office in letter dated February 9, 2006.</td>
<td>Implement bylaw.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCR2</td>
<td>Regulatory mechanism for BMP operation and maintenance (O&amp;M)</td>
<td>Highway Dept.</td>
<td>Regulation development and adoption; maintenance of inspection reports.</td>
<td>Stormwater Management bylaw approved at Town Meeting on October 24, 2005 includes Operation, Maintenance, and Inspection Schedule requirements for privately-owned facilities, and assigns maintenance responsibility. The Stormwater Management bylaw was approved by the Attorney General’s Office in letter dated February 9, 2006.</td>
<td>Implement bylaw.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Pollution Prevention and Good Housekeeping in Municipal Operations

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGH1</td>
<td>Street sweeping</td>
<td>Highway Dept.</td>
<td>Continue street sweeping program, note reduction in sediments in catch basins, quantities of material collected.</td>
<td>Street sweeping conducted April – July of 2005: 2,730± cy collected at cost of $21,819 and 1,040 hrs of labor. Second round of street sweeping conducted August 2005: 540 cy collected at cost of $3,357 and 160 hours of labor. All accepted streets were swept.</td>
<td>Continue program through all permit years.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGH2</td>
<td>Catch basin cleanouts</td>
<td>Highway Dept.</td>
<td>Continue catch basin cleanout program. Record number of catch basins cleaned, sediment collected.</td>
<td>The Town conducted annual catch basin cleanouts in Fall of 2005 via a contractor. 3079 catch basins were cleaned and a total of 2,460 cubic yards of material removed. Total cost of $19,680 and 328 hours of labor.</td>
<td>Continue program through all permit years.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGH3</td>
<td>Record keeping/schedule of maintenance</td>
<td>Highway Dept.</td>
<td>Continue to keep listing of regular maintenance activities, schedules, and procedures.</td>
<td>Records added to maintenance file. Examples of records: Work performed on Godfrey, O'Brien and Huckleberry Brooks by hired contractors including repair of brook walls and culvert repairs at cost of $82,000. (Note - Consultant contracted to prepare a feasibility study for the repair and long-term maintenance of the O'Brien and Godfrey Brook channels ($16,800)).</td>
<td>Continue to maintain records and update program as needed.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGH4</td>
<td>Recycling and waste disposal program</td>
<td>Highway Dept.</td>
<td>Continue recycling and waste disposal program for municipal operations. Record quantities involved in program.</td>
<td>Program ongoing. 8,224 yds of mulched lawn waste collected in Fall of 2005 from 120 miles of Town streets at cost of $34,141 and 1,419 hours of labor.</td>
<td>Continue program through all permit years.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Pollution Prevention and Good Housekeeping in Municipal Operations cont’d.

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGH5</td>
<td>Waste disposal/housekeeping training and practices</td>
<td>Highway Dept.</td>
<td>Continue proper disposal procedures, conduct training, keep logs of material disposal.</td>
<td>North Country Environmental performed a seminar outlining waste disposal and good housekeeping training and practices to 14 highway department employees on December 21, 2005.</td>
<td>Continue program through all permit years.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGH6</td>
<td>Identification, inspection, maintenance of Town owned BMPs</td>
<td>Highway Dept.</td>
<td>Inspection and maintenance of structures, maintain records.</td>
<td></td>
<td>Perform recommended maintenance activities on detention basins. Continue program.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part IV. Summary of Information Collected and Analyzed

Dry-weather field screening of all Town outfalls was completed by a consultant in the Fall of 2005 and “Dry Weather Outfall Investigation Summary Report” was completed November 2005. 22 outfalls were identified for further investigation at a cost of approximately $25,000.

The quantities of materials accepted by the Town’s recycling programs are recorded by the Board of Health and have been included in the following section.

Part V. Program Outputs & Accomplishments

Education, Involvement, and Training

| Stormwater education materials collected and available at library | (y/n) | YES |
| Clean-up days held | (#) | 11 |

Household Hazardous Waste Recycling

| material collected (automotive waste oil) | (gal) | 2135 |
| material collected (household paint) | (gal) | 3636 |
| annual recycling (January 2005 - December 2005 (inclusive)) | (tons) | 1559 |

Legal/Regulatory

<table>
<thead>
<tr>
<th>Regulatory Mechanism Status (indicate with “X”)</th>
<th>In Place Prior to Phase II</th>
<th>Existing Regs Reviewed</th>
<th>Drafted</th>
<th>Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illicit Discharge Detection &amp; Elimination</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Erosion &amp; Sediment Control</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Development Stormwater Management</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accompanying Regulation Status (indicate with “X”)</th>
<th>In Place Prior to Phase II</th>
<th>Existing Regs Reviewed</th>
<th>Drafted</th>
<th>Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illicit Discharge Detection &amp; Elimination</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Erosion &amp; Sediment Control</td>
<td></td>
<td>X (partly)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Post-Development Stormwater Management</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
## Mapping and Illicit Discharges

<table>
<thead>
<tr>
<th></th>
<th>(#)</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of outfalls mapped to date</td>
<td>(#)</td>
<td>303 (3 new outfalls since initial GPS mapping effort)</td>
</tr>
<tr>
<td>Estimated or actual number of outfalls</td>
<td>(#)</td>
<td>303 (100%)</td>
</tr>
</tbody>
</table>

### Operations and Maintenance

<table>
<thead>
<tr>
<th>Description</th>
<th>(#)</th>
<th>3079 (cubic yards)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of structures cleaned</td>
<td>3079</td>
<td>2460</td>
</tr>
<tr>
<td>Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)</td>
<td>registered landfill</td>
<td></td>
</tr>
<tr>
<td>Disposal of yard waste</td>
<td>Composted and used by Parks and Highway Dept.</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Unit</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Average frequency of street sweeping (non-commercial/non-arterial streets)</td>
<td>times/yr</td>
<td>2</td>
</tr>
<tr>
<td>Average frequency of street sweeping (commercial/arterial or other critical streets)</td>
<td>times/yr</td>
<td>2</td>
</tr>
<tr>
<td>Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)</td>
<td>location</td>
<td>registered landfill</td>
</tr>
<tr>
<td>Anti-/De-Icing products</td>
<td>material</td>
<td>NaCl and limited CaCl₂</td>
</tr>
<tr>
<td>Salt pile(s) covered in storage shed(s)</td>
<td>(y/n)</td>
<td>Yes</td>
</tr>
</tbody>
</table>