TOWN OF BURLINGTON

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DEPARTMENT OF PUBLIC WORKS

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April 28, 2005

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, Massachusetts 02114

Annual Report - Reporting Period May 1, 2004 to May 1, 2005
Town of Burlington - Storm Water Management Program

To: Environmental Protection Agency

Attached to this transmittal letter is the Annual Report for the Town of Burlington's Storm Water Management Program for the reporting period May 1, 2004 to May 1, 2005.

This report combined with this transmittal letter constitutes a self-assessment review of compliance with the permit conditions. The attached report is constructed in table format to facilitate review of the progress on each Best Management Practice. The table contains a(n):

- assessment of the appropriateness of the selected BMPs
- assessment of the progress toward achieving the measurable goals
- summary of results of any information collected to date
- discussion of activities for the next reporting cycle
- discussion of any changes in identified BMPs or measurable goals

The Town of Burlington accomplished the following major activities during the 2nd permit year:

- finalized and distributed fact sheet to all Town residents on storm water pollution
- developed draft of fact sheet for sector businesses
- held second annual SWMC meeting
- completed mapping of Town storm water system
- developed draft of erosion and sedimentation control bylaw for both during construction and post-construction periods

If you have any questions or comments regarding the above or attached annual report, please contact Syamal Chaudhuri, DPW Superintendent, at Tel (781) 270-1670.

Sincerely yours,

Robert Mercier, Town Administrator
Town of Burlington, Massachusetts

Public Education and Outreach - Annual Report

Town of Burlington - Storm Water Management Program

Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities for 3rd Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
1 - 1	Develop brochure and / or fact sheet for homeowners	Final drafts - 1st yr; review by SWMC; distribute 2nd year	Extensive research done to identify resources materials. Pamphlet for homeowner has been drafted and reviewed by SWMC. Edits were incorporated. Brochure was mailed to all residents within Town.	Yes	None - completed	No	Completed - Brochure addresses 'What is storm water pollution', 'What you can do', auto maintenance, yard work, herbicides and pesticides, landscaping, and painting.
1 - 2	Develop brochure and fact sheet for sector businesses	Draft within 2nd year; review by SWMC; distribute 3rd year	Draft brochure for business sectors was developed. Brochure was reviewed by the SWMC. Currently food service facilities text under review by Board of Health.	Yes	Incorporate final changes and distribute to sector businesses.	No	Brochure addresses: - general best practices for all - landscape contractors - food service facilities - automotive repair shops
1 - 3	Collect / assemble educational materials for school use	Discuss with schools and collect materials 3rd year; implement into curriculum in 4th yr	Efforts were made to identify educational materials for school use during 1st and 2nd permit years.	Yes	Additional search for resources	Maybe	Adequate resource materials not identified (except for EPA placemat and stickers). Additional efforts will be made to identify educational materials; delay until 3rd year. Also, this curricula topic may not be a priority for schools compared with other objectives.
1 - 4	Place educational materials for BMPs 1-3 in library	Discuss with library and place materials in library in 3rd year	Some materials identified. Additional materials will be researched during the 3rd year as per BMP 1.3.	Yes	Implement BMP1-3	No	Intent was to place educational materials for children in library. If resources are identified, this will be done (as per BMP 1-3).
1 - 5	Add storm water information and links to Town web site	Convert materials to pdf format in 4th yr; develop web pg 5th yr	No progress during this reporting period.	Yes	Identify web references.	No	Additional resources needed for labor to generate a new web page. This activity may be budget constrained.

1 - 6	Publicize SWMC meetings for public education opportunities	Conduct at least 4 public meetings in 5 years	2nd Annual SWMC meeting held on March 2, 2005. Press releases were issued to local newspapers.	Yes	Will continue	No	---

Public Involvement and Participation - Annual Report

Town of Burlington - Storm Water Management Program

Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities for Next Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
2 - 1	Document existing public involvement opportunities	Summarize in 1st annual report	No activity	No	None	Yes	Summary of existing public involvement opportunities(BMP 2-1) is not useful, since these opportunities are now being created under the EPA permit (i.e., Annual SWMC meeting, hearings on new bylaws, etc). This BMP will not be continued.
2 - 2	Publicize participation opportunities with Shawsheen, Mystic River, and Ipswich Watershed Associations	Monitor publicity generated in local newspapers during permit term. Provide assistance to ensure publicity if needed.	No activity	Yes	Continue monitoring for publicity of appropriate events.	No	Activities of the Shawsheen, Mystic River, and Ipswich Watershed Associations are periodically publicized in the local newspaper. Further effort under this permit to publicize these activities is redundant and not needed. We will monitor to ensure that events are publicized and assist if needed.
2 - 3	Plan and implement projects with High School environmental group	Develop plan and implement projects during 4th and 5th years of permit	Initial conversations were held with Dr. David Luther at High School - Environmental Science program and leader of Students for Environmental Action club. Dr. Luther has retired. No contact with the school has been made during this period.	Maybe	On hold	No	Efforts on this BMP have been delayed to the 4th and 5th permit term. This BMP is deemed to have lower priority due to logistics of coordinating and / or supervising high school students to ensure effectiveness.
2 - 4	Publicize SWMC meetings for opportunities for public involvement	Maintain copies of publicity in file over 5 year permit term	2nd Annual SWMC meeting held on March 2, 2005. Press releases were issued to local newspapers.	Yes	Will continue	No	---

2 - 5	Issue press releases when storm water materials in library	Maintain copies of publicity in file over 5 yr permit term	Efforts were made to identify educational materials for school use during 1st and 2nd permit year. Adequate resource materials not identified (except for EPA placemat and stickers). Additional efforts will be made to identify educational materials; delay until 3rd year. [d] permit years.	Yes	Will be done	No	See BMP 1-4

Illicit Discharge Detection and Elimination - Annual Report

Town of Burlington - Storm Water Management Program

Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities Next Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
3 - 1	Map storm water system and outfall locations	Complete map and outfall database by end of 2nd permit year	The GIS mapping and outfall database is now complete.	Yes	Some manual checking of mapping database will occur.	No	Completed during 2nd permit year. Work left on mapping includes corrections to flow direction and the addition of some outfall locations was finished.
3 - 2	Finish map database and assign names for tributaries that discharge into named waterbodies	Finalize database in 2nd year; submit revised waterbodies list to EPA / DEP as permit modification if needed; and update mapping database in 3rd and 5th years from manual checking selected data.	Completed - GIS mapping and outfall database is 100 percent complete.	Yes	Submit information as needed to EPA.	No	Completed during 2nd permit year.
3 - 3	Develop sampling and analysis plan for dry weather flows	Plan completed in year 1.	Completed	Yes	None	No	Completed - A plan was developed during 1st permit year to sample 5 locations of dry weather flows detected during the mapping field verification. Two samples were collected from each location.
3 - 4	Visually inspect outfalls for dry weather flows	Selective inspection 1st & 2nd year; spot inspection yrs 3-5, inspection records in program file	Town-wide inspection for first year was completed.	Yes	Selected inspections will be done if needed	No	Completed - A field check of the entire town was completed as part of field verification to support the mapping activity. Five (5) outfalls were identified as having dry weather flows.

3 - 5	Conduct sampling at outfalls with dry weather flows	Conduct sampling - selected outfalls in 1st yr; selected additional sampling in years 3 & 5 if needed; results in program file	Sampling and analysis activities were completed at 5 outfall locations during 1st permit year.	Yes	Will be done if needed	No	Each outfall location was sampled for bacteria, ammonia, surfactants, conductivity, and fluorides. Since no flowing water was occurring at 4 of 5 sites, samples of standing water at the mouth of pipe were taken. Based on these results, no illicit connections are believed to exist at these locations.
3 - 6	Develop training materials for DPW / others for illicit discharge	Develop training materials 4th year	No activity during this year	Yes	None	No	Rescheduled for completion in 4th year.
3 - 7	Review current bylaws / regs relevant to illicit discharge - Burlington and other towns	Review to be completed in 1st year	Substantially complete	Yes	Identify additional materials	No	Extensive effort was made during the 1sr permit year to identify bylaws in use by others districts (nationwide). Bylaws have been obtained that will serve as a model for Burlington's adoption and implementation of an illicit discharge bylaw. A first pass review of these bylaws has been completed.
3 - 8	Develop draft bylaw to prohibit illicit discharge	Develop 1st draft bylaw in 1st year and brought to Town Meeting in 4th year for approval	50 percent complete	Yes	Hold meetings with Town Departments to arrive at a consensus on implementation logistics for a new bylaw	No	After the review of bylaws from other districts (BMP 3-7), a rough draft of a bylaw was circulated to all relevant town departments for review and comment. Comments have been received. Meetings will be held during 3rd year to discuss. A full draft of a proposed bylaw will also be generated. Town meeting approval of bylaw is rescheduled until 4th year.
3 - 9	Develop illicit discharge and detection plan	Draft plan scheduled for completion in 3rd year; final plan to be completed 4th year	No activity during this reporting period.	Yes	Draft plan to be completed during the coming year	No	Finalization of plan has been scheduled for the 4th year.
3 - 10	Train DPW personnel to recognize illicit discharges	Train DPW / others in 5th year (which is after BMP 3-9 completed).	No activity scheduled for this reporting period.	Yes	None	No	Delayed until 5th year since it depends on completing BMP 3-9.
3 - 11	Implement discharge and detection plan	Plan will be implemented in year 5 and will be documented by records of activities relative illicit discharge and detection.	No activity scheduled for this reporting period.	Yes	None	No	First implementation of illicit discharge and detection has been scheduled for 5th year.

Construction Site Storm Water Runoff Control - Annual Report

Town of Burlington - Storm Water Management Program

Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities for Next Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
4 - 1	Collect and summarize other towns' sedimentation and erosion control bylaws	Sample bylaws collected, will be put in file for review.	Extensive effort to identify other districts' bylaws as a model has been completed. Review of these bylaws has been completed.	Yes	Continue review of other districts' bylaws.	No	Substantially complete - To be continued during 3rd permit year as new materials are identified.
4 - 2	Summarize existing bylaws and regs within Burlington for evaluating storm water impacts	Summary memo to file (completed in 1st year)	Not completed	No	None scheduled	Yes	Put on hold - The MA State Wetlands Protection Act and Burlington Bylaw Articles XIV (Wetlands Protection) are the main regulations that offer evaluation of storm water impacts. These regulations are well known to Town residents. An additional summary memo would not provide any significant additional value.
4 - 3	Conduct meetings with various stakeholders in Town to obtain input regarding bylaw implementation	Notes summarizing the results of these meetings (completed in 1st or 2nd year) in the form of minutes of meeting taken during Annual SWMC meeting.	Some discussions have been done with members of the Stormwater Management Committee (which represents other Boards in Town).	Yes	Ongoing	No	---

4 - 4	Develop draft sedimentation and erosion control bylaw and obtain final approval	Draft bylaw completed in 2nd year; proposed bylaw for Town meeting approval in 3rd year	A first draft erosion and sedimentation control bylaw has been developed during the 2nd permit year. Substantial discussions have been held with members of the SWMC. Comments have been generated.	Yes	Comments to be incorporated during the 3rd permit year. Final draft to be considered for approval by the SWMC. Approved draft to be submitted to Town Meeting for final approval.	No	1st draft of erosion and sedimentation control bylaw has been completed. Draft incorporated post construction runoff control also.
4 - 5	Develop site inspection checklists to support bylaw implementation	Draft checklists completed in 5th year	No activity scheduled for this reporting period	Yes	To be done in 5th permit year. No activity scheduled for the next reporting period.	No	---

Post Construction Stormwater Management - Annual Report
Town of Burlington - Storm Water Management Program
Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities for Next Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
5 - 1	Collect and summarize other towns' sedimentation and erosion control bylaws for post construction control	Sample bylaws collected, will be put in file for review.	Extensive effort to identify other districts' bylaws as a model has been completed. Review of these bylaws has been completed.	Yes	Continue review of other districts' bylaws.	No	Substantially complete - To be continued during 3rd permit year as new materials are identified.
5 - 2	Summarize existing bylaws and regs within Burlington for eval stormwater impacts for post construction control	Summary memo to file (completed in 1st year to be done with BMP 4-2)	Not completed	No	None scheduled	Yes	Put on hold - The MA State Wetlands Protection Act and Burlington Bylaw Articles XIV (Wetlands Protection) are the main regulations that offer evaluation of storm water impacts. These regulations are well known to Town residents. An additional summary memo would not provide any significant additional value.
5 - 3	Conduct meetings with various stakeholders in Town to solicit input on implementing bylaw for post construction control	Notes summarizing the results of these meetings (completed in 1st or 2nd year) in the form of minutes of meeting taken during Annual SWMC meeting.	Some discussions have been done with members of the Stormwater Management Committee (which represents other Boards in Town).	Yes	Ongoing	No	---

5 - 4	Develop draft sedimentation and erosion control bylaw and obtain final approval for post construction control	Draft bylaw completed in 2nd year; proposed bylaw for Town meeting approval in 3rd year	A first draft erosion and sedimentation control bylaw has been developed during the 2nd permit year. Substantial discussions have been held with members of the SWMC. Comments have been generated.	Yes	Comments to be incorporated during the 3rd permit year. Final draft to be considered for approval by the SWMC. Approved draft to be submitted to Town Meeting for final approval.	No	1st draft of erosion and sedimentation control bylaw has been completed. Draft incorporated post construction runoff control also.
5 - 5	Develop site inspection checklists to support bylaw implementation for post construction control	Draft checklists completed in 5th year	No activity scheduled for this reporting period	Yes	To be done in 5th permit year. No activity scheduled for the next reporting period.	No	---

Pollution Prevention and Good Housekeeping - Annual Report
Town of Burlington - Storm Water Management Program
Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities for Next Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
6 - 1	Summarize existing procedures within Burlington for preventing pollution from parks/open space, fleet, storage yards, roads/parking lots, and storm sewer maintenance activities	Summary memo to file (to be completed in 4th year)	Work has begun to identify and collect existing procedures.	Yes	Complete activity to identify and collect existing procedures.	No	Rescheduled for completion in 4th year. Requires interviews with various town personnel.
6 - 2	Summarize existing Town of Burlington programs for preventing pollution (including Recycling, Haz Waste Collection, mercury recycling, activities of stream cleaning committee, and stream cleaning program)	Summary memo to file (completed in 4th year)	Work has begun to assemble materials for this activity.	Yes	Complete summary of existing Town of Burlington programs	No	Rescheduled for completion in 4th year. Requires interviews with various town personnel.
6 - 3	Develop and promulgate procedures (as needed) for controlling pollutant discharges from the maintenance of parks and open space	Procedures drafted in 4th year and implemented in 5th year	No activity.	Yes	Draft procedures during 4th year.	No	Rescheduled for completion in 4th and 5th years
6 - 4	Develop and promulgate procedures (as needed) for controlling pollutant discharges from the maintenance of vehicle fleet	Procedures drafted in 4th year and implemented in 5th year	No activity.	Yes	Draft procedures during 4th year.	No	Rescheduled for completion in 4th and 5th years
6 - 5	Develop and promulgate implement procedures (as needed) for controlling pollutant discharges from the maintenance of storage yards	Procedures drafted in 4th year and implemented in 5th year	No activity.	Yes	Draft procedures during 4th year.	No	Rescheduled for completion in 4th and 5th years

6 - 6	Develop and promulgate procedures (as needed) for controlling pollutant discharges from the maintenance of streets and parking lots	Procedures drafted in 4th year and implemented in 5th year	No activity.	Yes	Draft procedures during 4th year.	No	Rescheduled for completion in 4th and 5th years
6 - 7	Develop and promulgate procedures (as needed) for controlling pollutant discharges from the maintenance of storm sewer system	Procedures drafted in 4th year and implemented in 5th year	No activity.	Yes	Draft procedures during 4th year.	No	Rescheduled for completion in 4th and 5th years
6 - 8	Develop training materials for controlling pollutant discharges from operation and maintenance activities by town personnel	Training materials to be drafted in 5th year	No activity. Not scheduled for this reporting period.	Yes	No activity scheduled for the next reporting period.	No	Rescheduled for completion in 5th year.
6 - 9	Finalize training materials and implement training sessions for controlling pollutant discharges from operation and maintenance activities by town personnel	Training materials to be finalized in 5th year and training sessions implemented in 5th year	No activity. Not scheduled for this reporting period.	Yes	No activity scheduled for the next reporting period.	No	Rescheduled for completion in 5th year

BMPs for Meeting TMDL - Annual Report

Town of Burlington - Storm Water Management Program

Reporting Period: May 1, 2004 to May 1, 2005

BMP ID #	BMP Description	Measurable Goal	Progress Toward Achieving Goals	BMP Still Approp 'yes / no'	Activities for Next Reporting Cycle	Changes Req'd in BMP 'Yes / No'	Comments, Notes, and/or Summary of Results
7 - 1	Continue street sweeping program	Priority to be given in both frequency and priority to Butterfield Pond, Vine Brook, Sandy Brook, and Long Meadow Brook to reduce turbidity (implemented in all 5 years); budget avail for review	Ongoing	Yes	Continue program	No	---
7 - 2	Implement illicit discharge & detection plan	Priority given to Long Meadow Brook and Sandy Brook areas which are impaired with pathogens and have TMDLs (to be implemented in 5th year). Records of activity to be placed in program file	No activity scheduled for this reporting period.	Yes	No activity scheduled for the next reporting period.	No	First implementation of illicit discharge and detection plan will not occur until the 5th year.
7 - 3	Implement Control Measures 6-3 to 6-7 to reduce pathogen load and other pollutants contributed by storm sewers to Vine Brook, Sandy Brook and Long Meadow Brook. (repeat from above)	Procedures drafted and implemented in 5th year	No activity during this reporting period	Yes	Draft procedures during 5th year.	No	Rescheduled for completion in 5th year
7 - 4	Develop surface water sampling plan (both source and in-stream) for fecal coliform on Vine Brook, Sandy Brook, and Long Meadow Brook (impaired streams)	Develop plan in 5th year	Not scheduled for this reporting period.	Yes	No activity scheduled for the next reporting period.	No	---
7 - 5	Implement surface water sampling plan	Conduct sampling in 5th year	Not scheduled for this reporting period.	Yes	No activity scheduled for the next reporting period.	No	---