

City of Attleboro, Massachusetts

Stormwater Management Plan

July 2003

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Executive Summary

This document presents the Stormwater Management Plan (SWMP) for the City of Attleboro. The SWMP was developed to meet requirements of the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Phase II stormwater regulations.

Background on the Phase II Program

In 1987, the Environmental Protection Agency (EPA) amended the Clean Water Act to require a two-phased national program to address water pollution from stormwater. Phase I, promulgated in 1990, addressed stormwater discharges in approximately 900 of the nation's largest cities.

Phase II of the stormwater program was published in the Federal Register on December 8, 1999. The Phase II regulations require operators of municipal separate storm sewer systems (MS4s) located in urbanized areas with populations of fewer than 100,000 people to obtain a NPDES permit for their stormwater discharges. In Massachusetts, permits are issued jointly by EPA – Region I and the Massachusetts Department of Environmental Protection (DEP). Municipalities may obtain coverage through one of three permit types: a general permit, an individual permit, or a Phase I modified permit. General permits are highly encouraged by the EPA because they prescribe one set of requirements for all applicable permittees. A municipality applies for a general permit by submitting a Notice of Intent (NOI) to comply with the requirements of the general permit. The NOI must describe the SWMP including Best Management Practices (BMPs) and measurable goals for each of six minimum control measures discussed below.

As determined by the 2000 census, the entire City of Attleboro is an urbanized area and must obtain a NPDES permit. This may be done in Attleboro's case by submitting a NOI describing their SWMP under EPA's general NPDES Phase II permit.

The City has obtained a low-interest subsidized loan through DEP's Clean Water State Revolving Fund (SRF) program to help finance its stormwater management planning. This program assists cities, towns, and wastewater districts in the financing of water pollution abatement projects, including nonpoint source projects. The City's SRF financing will be used to develop the SWMP in accordance with Phase II Stormwater regulations. The SRF loans will also help finance the development of Geographic Information System (GIS) mapping of the stormwater collection system, including stormwater outfalls and receiving waters. The GIS mapping will be very useful in managing operations and maintenance of the stormwater system.

Stormwater Management Plans

The central focus of the NPDES Phase II permit is the SWMP. Each permittee designs its own SWMP with the goals of reducing the discharge of pollutants from the MS4 to the maximum extent practicable and protecting water quality.

To meet the “maximum extent practicable” standard, the City must develop and BMPs for the following six minimum control measures:

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

The BMPs are the core of the SWMP and are described in Sections 1 through 6 of this document.

Reliance on Another Entity for Satisfying One or More of the Control Measures

BMPs included in the SWMP become a part of the City’s permit requirements, even if the BMPs are administered by outside groups. The City may rely on other entities (such as a non-profit organization or other governmental organizations) to help perform one or more of the BMPs included in the SWMP. However, if the outside group is unable to continue administering the program, the City is still responsible for compliance with the permit terms. If an arrangement is established for an outside group to assist with a BMP, it may be appropriate for the entities to consider a memorandum of understanding or a legal agreement that outlines the individual responsibilities of each party to help ensure that the BMP is carried out. EPA and DEP will allow adjustments in the management plan, so the City may be able to replace a failing program with another one administered by the municipality if necessary.

Executing the Stormwater Management Plan

This document describes the stormwater best management practices that Attleboro will complete during the next five years, through March 2008. After the City submits its Notice of Intent to EPA and DEP, the City must begin implementing the plan. Because the SWMP includes modifications to current municipal practices, coordination among several municipal boards and departments, and interaction with the public, there is significant work to be done.

The City should consider designating a “stormwater coordinator” for the Phase II SWMP, who would be responsible for coordinating tasks among City departments, completing the annual report to EPA and DEP, and generally making sure that the BMPs listed in the SWMP are completed. It is important to note that the City is legally

required to complete all the BMPs listed in the NOI. The City may be considered to be in violation of its NPDES Phase II permit if it fails to complete any of the BMPs.

Existing Stormwater Programs in Attleboro

The City of Attleboro has implemented or supports many programs that help reduce stormwater pollution. While these were not specifically designed at the time of implementation to meet Phase II stormwater regulations, they are consistent with the BMPs required and may be enhanced as needed to meet the specific EPA requirements. The following describes the City's existing programs and BMPs.

Public Education and Outreach

The City Solid Waste Coordinator runs an annual Earth Day event to educate the public on environmental issues. This program promotes pollution reduction measures, which have a direct impact on water quality.

The Solid Waste Coordinator and Environmental Planner visit schools to present and discuss various environmental issues, including water quality, water conservation, and recycling. This program may easily be expanded into a more official City duty to fulfill Phase II stormwater regulations.

The City staff work a booth at the "Wednesday Night Market" held each Wednesday during the summer months in the downtown area. Staff provides information on recycling and hazardous materials management at this weekly event, which have an impact on water quality.

The City works with the Tenmile River Watershed Alliance to clean segments of the Tenmile River one to two times per year. The City provides equipment as needed to support these river clean-up efforts, including backhoes, trucks, and dumpsters. The Executive Office of Environmental Affairs (EOEA) Watershed Team has supported periodic clean-ups of the rivers in the watershed. The Watershed Alliance and EOEA Watershed Team have also conducted presentations, teacher workshops, catch basin stenciling, and other activities to increase public awareness of water quality issues throughout the Tenmile River watershed. Past practices have included catch basin stenciling by Girl Scouts in Attleboro to support the "Save The Bay" organization's efforts to protect Narragansett Bay.

The City will also participate in and benefit from the watershed-wide stormwater education project, which recently was awarded funding through DEP's 604b grant program. The goal of the project is to provide support to nonpoint source pollution control activities in the Tenmile River Watershed through an education program. Specific activities include: 1) the creation of a watershed stormwater education committee; 2) assessment of existing local education resources (i.e. staffing, materials, funding) and identification of future educational needs regarding stormwater pollution and management; 3) development of a "five-year Stormwater Education Program" for each watershed municipality, including Attleboro; and 4) development

of educational materials and resources to support implementation of the plan. The project will include development of brochures and pamphlets for distribution, portable information kiosks, and a website for use by all Tenmile River Watershed communities. Available stormwater and nonpoint source pollution videos will also be compiled and evaluated for potential broadcast on local cable access channels. The Town of Plainville is the lead watershed community for grant administration, but all of the watershed communities, including Attleboro, will participate in and benefit from the project. Completion of the stormwater education project is scheduled for June 2004. The overall budget is approximately \$43,000. DEP's 604b grant will fund approximately 85 percent of this total.

Illicit Discharge Detection and Elimination

“Illicit discharges” are contributions to the stormwater system that are not entirely composed of stormwater. These discharges include residential sewer connections inadvertently, but illegally, connected to the stormwater system; non-permitted industrial discharges, and accidental and intentional dumping into the stormwater system. Specifically, sanitary wastewater, septic tank effluent, commercial car wash waters, improperly disposed oil, radiator flush water, laundry wastewater, roadway accident spills, and improperly disposed auto/household toxics are not permitted in the storm drain system. EPA studies have found pollutant levels from these types of non-stormwater flows to be high enough to degrade the quality of the receiving waters, and even to threaten human and aquatic health.¹ Accordingly, under this program, federal regulations now require development of programs to locate and eliminate the sources of these pollutants.

The City currently identifies and corrects illicit connections. There is no formal program for illicit identification and elimination, but field crews are trained to recognize them and take appropriate measures as needed to correct the problem.

Illicit discharges are also being addressed by the City through public education measures, which emphasize the importance of proper waste management and disposal, and pollution prevention measures, which help prevent or reduce the impacts of illicit discharges. Impacts of failed or improperly maintained septic systems are of special concern since these can result in sewage discharge to surface water runoff, groundwater, or surface water directly. The City is addressing the potential issue of septic system failures through expanding the sanitary sewer system to areas reliant on septic systems. The City completed a wastewater collection system facilities plan in July 1996 that identified areas throughout the City that could benefit from the extension of sewer service. Many of these areas have since been or are being connected to the sewer through sewer expansion projects already completed or underway. Plans to connect remaining areas, primarily along the eastern and southern border of the City, are on hold until the impact of the increased service area on phosphorous levels in the municipal wastewater treatment plant effluent can be

¹ USEPA. Storm Water Phase II Final Rule Fact Sheet Number 2-5. Washington, DC. 2001. (www.epa.gov/npdes/pubs/fact2-5.pdf).

further evaluated. Where septic systems remain in place, regular inspection and maintenance is recommended, especially near drains or sensitive water bodies.

Construction Site Runoff Control

The Conservation Commission actively enforces the Massachusetts Stormwater Policy. As such, the Conservation Commission reviews all site plans and inspects all construction sites within its jurisdiction for erosion and sediment control. The Planning Board, Zoning Board, and Building Inspector review projects in their jurisdiction and also check for proper erosion and sedimentation control. The Department of Public Works also holds pre-construction meetings for subdivision developments. Trained staff review site plans. Regulations are enforced according to jurisdiction. Public hearings are triggered for all boards to notify the public of projects within the City and to allow public comment. Abutters are also notified through mailings for all permit applications.

The Conservation Commission and the DPW conduct site inspections of construction sites under their jurisdiction prior to, during, and after construction. The staff are trained in conducting these inspections. Furthermore, the Planning Board, Zoning Board, and Conservation Commission determine if the erosion and sediment controls for projects under their jurisdiction are appropriate during the planning stage.

If stormwater controls are not installed or maintained properly during construction, the City has the authority to shut down construction sites under the jurisdiction of the Planning Board, Zoning Board, or Conservation Commission until appropriate measures are taken.

Post-Construction Runoff Control

The Massachusetts Stormwater Policy is enforced in new development and redevelopment under the jurisdiction of the Planning Board, Zoning Board, and Conservation Commission, and BMPs are encouraged. The Planning Board typically requires infiltration as a BMP rather than detention where possible.

The local zoning and the wetland ordinance in the City also support “green” site design. An open space provision is included in the subdivision regulations. Open space residential development is generally encouraged. When appropriate, the City accepts open space for conservation programs as part of a development.

Pollution Prevention/Good Housekeeping

Appropriate City employees (i.e. Health Department, Department of Public Works, Fire Department) are generally trained in pollution prevention and good housekeeping through experience on the job and educational seminars geared towards specific programs, such as snow plowing and deicing. The City also hires outside contractors to educate employees on spill prevention and clean-up on a regular basis.

The Department of Public Works has implemented an effective street sweeping program. This program includes sweeping downtown areas twice per week, weather permitting, throughout the year. All streets throughout the City are swept once per year in the spring to remove winter road sand and other debris. Streets that require additional cleaning beyond that regularly scheduled are handled on an individual basis as needed. “No parking” signs are used as needed in areas that are targeted for street sweeping, although parking is generally not a problem. If cars are illegally parked, they are towed so that the street sweeping may be completed. The City owns one street sweeper that it uses to clean the downtown areas and may evaluate future equipment needs to bolster the street sweeping program as needed. A contractor is hired to do the annual springtime street sweeping throughout the City, outside of the downtown areas. The residuals from the street sweeping are properly disposed of at the wastewater treatment plant sludge landfill.

The Department of Public Works follows a careful deicing program that varies the salt/sand mixture and application rates according to weather and road surface conditions for the most effective program considering environmental (impacts of salt) and public safety factors. The road salt is stored in a covered salt shed. The sand/salt mixture is not stored under the shed, but efforts are made to cover this pile with a tarp after mixing and when not being used. Snow removal (hauling snow to a “snow dump” area) is not generally needed. In the years when snow disposal is required (other than just normal snow plowing to clear the road), snow is properly removed and transferred to areas away from water bodies, wetlands, and other sensitive areas.

Vehicle maintenance is done at the DPW Highway garage by City DPW workers experienced in good housekeeping practices, including spill prevention/cleanup. The City has a program to collect oil and other hazardous wastes for proper disposal.

The Department of Public Works has dedicated personnel and equipment for catch basin cleaning. Catch basin cleaning is currently planned and recorded using paper mapping. Once the GIS mapping of the City system is completed in the summer of 2003, the electronic data layers will be used to more effectively track and schedule cleaning. Catch basins in high priority areas (flood-prone areas, bottom of hills, heavily sanded streets) are cleaned most frequently. The catch basins are cleaned using a City-owned clamshell and truck. Storm drain pipes are also cleaned typically in areas that are prone to flooding problems. The storm drain cleaning is done using City-owned clamshell equipment, or if needed, a contractor is hired to clean the drains with rented vacuor equipment. Residuals are disposed of at the sludge landfill.

The City Park and Forestry Department and the Recreation Department maintain parks, playgrounds, playing fields, and other recreation areas. In general, the Departments minimize the amount of fertilizer applied, and uses integrated pest management to minimize pesticides. A program is in place whereby bare areas are re-vegetated. Low-water use/native vegetation is used for new landscaping.

The City Park and Forestry Department has a tree planting and maintenance program. Approximately 50 trees are planted each year. Although there is no ordinance for replacing trees that are cut down, the City generally encourages this practice.

The City enforces a local ordinance that requires residents to pick up after their pets.

City employees watch for illegal dumping activity while doing their regular tasks. No dumping signs are posted at the end of selected dead end streets or other areas where problems have been noted.

The City keeps an inventory of municipal hazardous waste and materials that could contaminate stormwater (like road salt). The Fire Department oversees this inventory. As a state requirement, the City also maintains records of types of material used or generated by the City, quantities, location, safety issues, and the method of storage. The City's employees are trained in hazardous materials management, as appropriate. All hazardous materials are clearly labeled and stored away from high-traffic areas on pallets or in areas with containment. The City minimizes the amount and types of hazardous materials stored on-site. Hazardous waste drop-offs for residents are also provided monthly from April through November for general automotive products such as used oil, oil filters, and antifreeze, and paint, mercury thermometers, batteries, and propane tanks. The City also has an annual Household Hazardous Waste Collection Day on the second Saturday in June for items such as pesticides, pool chemicals, adhesives and wood preservatives. An outside vendor assists with the waste collection effort. The City stores its own motor oil in contained areas to be removed and disposed of periodically through a state contract with a licensed hauler, at no cost. Oil is temporarily stored in state-approved above ground tanks. The City has one 500-gallon tank for collection of waste oil.

The City's employees are trained in spill prevention and response. An outside vendor trains DPW workers on appropriate spill prevention and response measures as needed according to employee turnover. It is estimated that the training is conducted every two to three years.

The City also will be implementing a stormwater improvements project at the City's Wall Street Highway Yard. This \$260,000 project recently received 60 percent funding assistance from DEP's 319 Nonpoint Source Competitive Grant program. Completion of final design and permitting is expected in spring 2003. Construction is scheduled for completion in summer 2004. The City's Wall Street Highway Yard is located on a 6.6-acre parcel on the banks of the Tenmile River. The property is used primarily by the City's Department of Public Works for storage and maintenance of vehicles and equipment. The Health Department uses a small portion of the facility for the storage of waste materials collected from household hazardous waste collection days, and the Water Department also stores some vehicles at the site.

There is currently no treatment or buffer for stormwater runoff from the highway facility. The drainage system from the highway yard discharges directly into the Tenmile River from two outfalls and two overland flow locations. The goal of the stormwater management project is to improve water quality by implementing structural and non-structural BMPs to reduce non-point source pollution entering the Tenmile River from the site. Structural stormwater management measures to be implemented include the installation of three separate proprietary stormwater treatment systems, a perimeter sand filter, and two individual biofiltration systems. Also, a riparian buffer will be reestablished, and general good housekeeping practices and pollution prevention measures will be maintained. Project success will be measured through pre- and post-project water quality monitoring.

Specific projects associated with the Wall Street Highway Yard improvements include the following: 1) Installation of two storm drain inlet catch basins at the site entrance and approximately 200 feet of storm drain piping connected to a Stormceptor device or equivalent stormwater treatment device. 2) Installation of a sand filter at the rear of the DPW building to collect runoff from drainage improvements (approximately 27,000 square feet of new pavement and curbing). The sand filter will consist of two parallel trench-like chambers designed to capture and filter runoff. The first chamber will capture sediment, serving as pre-treatment of effluent at this site. 3) Installation of BMPs at the Health Department Waste Storage Area to treat runoff from drainage improvements (2,000 square feet of asphalt paving with curbing). One new inlet catch basin, a bioretention filter encircling the catch basin, and storm drain piping will be installed and connected to a Vortechs or similar treatment system. 4) Installation of four new storm drain inlet catch basins along with 420 feet of storm drain piping that will convey stormwater to a Vortechs or similar treatment system in the Forestry Building Parking Area. 5) Installation of a 1,113 square foot bioretention facility and a 270 foot long dry swale in the southern half of the site. 6) Installation of a 10 foot to 25 foot wide vegetated buffer strip along the bank of the Tenmile River along the property boundary. 7) Installation of a freestanding canopy to cover an existing fuel island to prevent spilled fuel from washing into the site's drainage system. 8) Development of Operation and Maintenance Plans for all facilities installed under the project to ensure that systems function as designed. 9) Implementation of an employee training program to ensure that operation and maintenance of the BMPs and good housekeeping practices are properly carried out. 10) Installation of signage at the site to educate the public about the project and the function of the BMPs. 11) Development and distribution of brochures describing the project and inviting site tours. 12) Quarterly reporting and project monitoring to evaluate project results and water quality improvements.

Proposed BMPs

A summary table of BMPs in the City's SWMP is provided in Appendix A. This table provides an estimate of cost beyond what is currently budgeted by the City for existing BMPs to implement the new or enhanced measures for the five year permit term. The BMPs are described in greater detail in the following sections. The BMPs

listed recommend continuation and/or modification of existing stormwater management practices as well as addition of practices to help the City best meet the permit requirements.

Supporting Documentation

EPA requires each Phase II permittee to retain the data, records, and other documents used to develop the SWMP. The “NPDES Phase II Stormwater Permitting – Manual for Developing a Stormwater Management Plan” that accompanies this document provides extensive background information about many of the BMPs selected for Attleboro’s SWMP. The Manual draws upon available literature and discussions with industry representatives, municipal employees, and regulators from state and federal agencies. The Manual also lists other resources (websites, organizations, etc.) for stormwater management.

This Manual should be retained with the SWMP for future reference.

Notice of Intent

Appendix B includes the Notice of Intent (NOI) that will be filed with DEP and EPA – Region I. The tables summarize the SWMP, and are the only paperwork required by the permitting authorities.

Section 1

Control Measure 1: Public Education and Outreach

Control Measure 1, Public Education and Outreach, requires the City to educate its residents about the impacts of their activities on stormwater, and the impacts of polluted stormwater discharges on water quality. Educating the public about the importance of stormwater management can help lead to greater support for and compliance with the Stormwater Management Plan.

To comply with Control Measure 1, the City must “implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps to reduce stormwater pollution. The public education program should inform individuals and households about the problem and the steps they can take to reduce or prevent stormwater pollution.”

The following public education/outreach best management practices (BMPs) will be implemented to fulfill the requirements of Control Measure 1. The City will also participate in and benefit from the watershed-wide stormwater education project funded by DEP’s 604b grant program. This program will create a watershed stormwater education committee, assess existing local education resources and identify future educational needs regarding stormwater pollution and management, develop a “five-year Stormwater Education Program” for each watershed municipality, including Attleboro, and develop education materials and resources to support implementation of the plan. The City will also engage in an outreach and training program as part of the stormwater management improvements at the Wall Street Highway Yard. These improvements are funded by DEP’s 319 Nonpoint Source Competitive Grant Program and will include posting signs at the site to educate the public about the project and the function of the BMPs, as well as the development of a brochure to distribute to area schools describing the project and inviting site tours, to be conducted by the City’s Environmental Planner.

BMP #1-1: Article/brochure about stormwater mailed to residents and businesses. Make article/brochure available at City Hall and the public library.

Description: Develop an article or brochure that discusses stormwater management issues to be mailed to every residence and business in Attleboro each year. Make the article/brochure available at City Hall and the library. Potential topics include a description of the hydrologic cycle, the impacts of development, pollutants from developed areas (including lawns), and impacts to local water bodies from stormwater pollution. Brochures may be developed with information provided by the EOEa Watershed Team or the Tenmile River Watershed Alliance. Materials made available through the watershed-wide stormwater education project funded by DEP’s 604b grant program may also be used to satisfy this BMP. The existing wetlands function and value brochure material may also be included. In accordance with Control Measure 3, at least one of the articles/brochures will inform the public about the hazards associated with improper waste disposal and illegal discharges to the MS4. The article/brochure will specifically mention the impacts of stormwater on the Tenmile River and other impaired water bodies in Attleboro.

Measurable goal: Article/brochure distributed annually to all residents and businesses and made available at City Hall and the public library.

Schedule: By the end of each permit year, prepare an article/brochure (research the internet and other resources for ready-made generic articles). Mail the article/brochure during the second quarter of the following permit years.

Responsible department/person: Environmental Planner.

Cost: 24 hours of staff time per year for preparing article/brochure.

BMP #1-2: Update City website to include information on stormwater management.

Description: Update the City website to include information on stormwater management issues. Information presented in the article/brochure produced under BMP#1-1 may also be used for this BMP. In addition to posting information on the potential topics listed under BMP#1-1, the City may post the SWMP, pertinent clean-up schedules, and links to the Conservation Commission, Tenmile River Watershed Alliance and other local environmental groups on the website. The website developed through the watershed-wide stormwater education project funded by DEP's 604b grant program may also be used to satisfy this BMP.

Measurable goal: City website updated to include information on stormwater management issues.

Schedule: By the end of the first permit year, post information on stormwater management issues on the City website. Use information gathered under BMP #1-1 to post on the website. Maintain website thereafter.

Responsible department/person: Environmental Planner/Conservation Commission.

Cost: 24 hours of staff time per year to update and maintain the website, as needed.

BMP #1-3: Sponsor Cleanup Days for rivers and water bodies within City limits.

Description: Expand on City's role in cleaning up the Tenmile River and other water bodies within City limits to include organizing, advertising and staffing of efforts in addition to existing support of the Tenmile River Watershed Alliance cleanup days. Advertise river clean-up activities on City website, in newspapers, and through postings around the City. Provide staff to assist with clean-up and help organize volunteers and clean-up effort. Work with the Tenmile River Watershed Alliance in organizing the clean-up effort and promoting public awareness of water quality issues.

Measurable goal: Hold City-sponsored Cleanup Days.

Schedule: Hold City-sponsored river clean-up day by end of second permit year and each permit year thereafter.

Responsible department/person: Department of Public Works, Health Department, Park and Forestry Department.

Cost: 48 hours of staff time per year to advertise and organize clean-up effort.

BMP #1-4: Stormwater education program for school children.

Description: Give a 30-minute presentation about stormwater or stormwater related topics and the

importance of stormwater management to City middle schools once per year. This program will build on existing outreach efforts to schools. Attempt to establish a consistent program through the School Superintendent's office and School Committee rather than relying on individual teachers and City employees to make the program work. Attempt to secure outside speakers from various environmental and state organizations.

Measurable goal: Presentation given to City middle schools.

Schedule: Once each school year during each year of the permit term.

Responsible department/person: Environmental Planner.

Cost: 16 hours of staff time to prepare a presentation; 8 hours of staff time per year.

BMP #1-5: Present stormwater management issues to organizations in the City.

Description: Give a 30-minute presentation about stormwater or stormwater related topics and the importance of stormwater management to local chapters of the Rotary, Boy/Girl Scouts, Chamber of Commerce, Kiwanis, YMCA, or other public groups to promote awareness.

Measurable goal: Presentation given to at least one group annually.

Schedule: Once each winter during each year of the permit term.

Responsible department/person: Environmental Planner.

Cost: 16 hours of staff time to prepare a presentation; 10 hours of staff time per year to deliver the presentation.

BMP #1-6: Educate dog owners about picking up dog waste.

Description: Mail a fact sheet to every dog owner in Attleboro. Fact sheets will be included in the annual dog registration mailing by the City Clerk's office. The fact sheet will mention that dog waste should not be disposed of in catch basins.

Measurable goal: Pet waste fact sheets mailed to all dog owners in annual dog registration mailing.

Schedule: Develop the fact sheet by the end of the first permit year. Include fact sheet with dog registration mailing beginning in second permit year and annually thereafter.

Responsible department/person: Develop fact sheet: Health Department. Distribute fact sheet: City Clerk.

Cost: 16 hours of staff time per year to prepare the fact sheet. Copying and mailing costs will be minimal.

BMP #1-7: Install and maintain signs for stormwater management and pet waste clean-up at schools and parks.

Description: Publicize the importance of stormwater management and pet waste control and the impact of these measures on public health and the environment through posting signs at public facilities, such

as schools and parks. Signs should be inspected twice per year (spring and fall) and repaired or replaced as necessary.

Measurable goal: Number of signs installed, number of signs inspected.

Schedule: Install new signs at all schools and parks by end of second permit year. Inspect all signs and repair them as necessary during each spring and fall of the permit term.

Responsible department/person: Park and Forestry Department (parks) and Recreation Department (schools).

Cost: Variable, depending on how many new signs are required. Inspections will require minimal time.

BMP #1-8: Staff a table with information about stormwater at annual Earth Day event.

Description: The City hosts an annual Earth Day event to educate the public on environmental issues. Information about stormwater should be made available at this event (pamphlets, brochures, poster, etc.) and staff should be available to address questions on stormwater management issues. The portable informational kiosks and brochures developed through the watershed-wide education project funded by DEP's 604b grant program may also be used to support this BMP.

Measurable goal: Table staffed each year; number of brochures handed out.

Schedule: Collect materials during the first permit year. Staff an informational table during permit years 2 through 5.

Responsible department/person: Health Department.

Cost: 24 hours of staff time to collect information during the first year. 16 hours (8 hours of staff time each year for two people) to staff an information booth during years 2 through 5.

BMP #1-9: Continue to staff a table at weekly "Wednesday Night Market" held during the summer months. Expand information dispensed to include stormwater-related topics.

Description: The City staffs a table at the weekly "Wednesday Night Market" held in the downtown area during the summer months to educate the public on environmental issues such as recycling and hazardous waste management. Information about stormwater will also be made available at this event and staff should be available to address questions on stormwater management issues. The portable informational kiosks and brochures developed through the watershed-wide education project funded by DEP's 604b grant program may also be used to support this BMP.

Measurable goal: Table staffed at "Wednesday Night Market"; number of stormwater brochures handed out.

Schedule: Collect informational materials and provide stormwater management information at "Wednesday Night Market" during permit years 2 through 5.

Responsible department/person: Health Department.

Cost: 24 hours of staff time to collect information during the first year. 40 hours per year to staff an

information booth during years 2 through 5, or as currently budgeted.

BMP #1-10: Annual update of the Stormwater Management Plan at a televised Municipal Council meeting.

Description: Annually, the DPW and/or Environmental Planner will request time on the Municipal Council agenda to provide an informational update on the Stormwater Management Plan. Topics will include ongoing and upcoming events. The Municipal Council meetings are televised on local access cable TV and are also covered in Attleboro's daily newspaper.

Measurable goal: Annual update of the SWMP at a televised Municipal Council meeting.

Schedule: Spring of each permit year starting in the second permit year.

Responsible department/person: Environmental Planner and Department of Public Works.

Cost: 16 hours of staff time to prepare and present the Stormwater Management Plan update.

BMP # 1-11: Appear on local access television talk show on City issues to discuss stormwater management issues.

Description: Annually, the DPW, Health Department, and/or Planning Department will notify the host of the show that representatives are available to discuss stormwater issues.

Measurable goal: Periodic discussion of the importance of stormwater management and what it means for the City and its residents on a local access television.

Schedule: Once each permit year.

Responsible department/person: Planning Department/Health Department/Department of Public Works.

Cost: 16 hours of staff time to prepare for appearance on the local access television show.

BMP # 1-12: Post information on stormwater management issues on local access television channel.

Description: Prepare informational advertising or announcements for stormwater management issues to appear on local access television channel during periods of no programming. Information would be flashed on the screen periodically along with other topics of interest. The stormwater management videos gathered as part of the watershed-wide stormwater education project funded by DEP's 604b grant program may also be used to broadcast on the local access channel, as appropriate.

Measurable goal: Stormwater information posted and updated on local access cable television channel during periods of non-programming.

Schedule: Variable throughout permit term.

Responsible department/person: Environmental Planner.

Cost: 24 hours of staff time in year one to prepare information for posting on local access channel. 24 hours of staff time each year to coordinate postings with local access channel.

Section 2

Control Measure 2: Public Participation and Involvement

To comply with Control Measure 2, the City must comply with applicable State and local public notice requirements. In addition, EPA encourages other Best Management Practices to involve the public.

BMP #2-1: Comply with state public notification guidelines at MGL Chapter 39 Section 23B.

Description: Post notices announcing upcoming meetings as required by state law. The City also notifies newspapers of upcoming meetings.

Measurable goal: Notices posted in designated locations.

Schedule: Ongoing throughout permit term.

Responsible department/person: Department of Public Works/Environmental Planner/Health Department

Cost: Negligible.

BMP #2-2: Stencil catch basins with don't dump message (i.e. "Don't Dump – Drains to River").

Description: Work with volunteer group, such as the Boy/Girl Scouts and/or the Tenmile River Watershed Alliance, to stencil catch basins throughout the City. A reasonable goal is to stencil up to 100 catch basins per year for four years. Stenciling will be prioritized to address catch basins that drain to more sensitive areas first.

Measurable goal: Number of catch basins stenciled.

Schedule: Each spring during years 2 through 5 of the permit term.

Responsible department/person: Department of Public Works.

Cost: Approximately \$400 for materials for stenciling up to 400 catch basins, including stencil, latex yellow traffic paint, maps, paint rollers/pans/stirrers, plastic work gloves, brooms, safety vests and cones. 24 hours of staff time per year will be required to identify the priority storm drains and train the volunteers. A police detail may be required.

Section 3

Control Measure 3: Illicit Discharge Detection and Elimination

Control Measure 3, Illicit Discharge Detection and Elimination, requires the City to map its storm drain outfalls and eliminate illicit connections from the storm drain system.

To comply with Control Measure 3, the City will need a program that:

- Creates a storm sewer system map showing the location of all outfalls, and names and locations of all receiving waters
- Develop ordinances or other regulatory mechanisms prohibiting illicit discharges into the separate storm sewer system and develop associated enforcement procedures and implementation
- Develop and implement a plan to detect and address illicit discharges, including illegal dumping, to the storm sewer system
- Develop and implement an information program describing the hazards associated with illegal discharges and improper disposal of waste to public employees, businesses, and the general public (can be part of Control Measure 1)

The following best management practices (BMPs) will be implemented to fulfill the requirements of Control Measure 3.

BMP #3-1: Conduct dry weather outfall screening.

Description: Locate and evaluate all stormwater outfalls during dry weather and make water quality observations on flowing outfalls for evidence of contamination. Sediment buildup should also be noted. Based on the water quality observations, rank outfalls to determine priority for further investigations to search for illicit connections in storm drains tributary to the outfalls.

Measurable goal: Percent of outfalls screened.

Schedule: Dry weather field screening will be conducted once per permit term. The first round will be conducted in summer 2003 as part of the City's SRF loan for development of a SWMP.

Responsible department/person: Department of Public Works.

Cost: Approximately \$12,000 is allocated to complete the first round of dry weather outfall screening as part of the City's SRF-funded stormwater management plan.

BMP #3-2: Map stormwater outfalls and receiving waters.

Description: Create a map of the stormwater collection system, including outfalls and receiving waters.

Measurable goal: Map created.

Schedule: All known outfalls will be located using GPS technology in spring/summer 2003. A GIS layer showing all outfalls will be added to the City's Geographic Information system (GIS) described under BMP #3-3 by the end of the first permit year.

Responsible department/person: Environmental Planner.

Cost: Approximately \$7,500 is allocated to locate the outfalls with GPS technology for use in GIS mapping as part of the City's SRF-funded stormwater management plan.

BMP #3-3: Map the stormwater collection system in a GIS.

Description: Create GIS mapping layers of the stormwater collection system. This includes digitizing as-built plans of the stormwater system. The following data will be entered into the GIS where available on the plans: location and invert elevation of manholes, pipe size and material, catch basin location and open discharge information.

Measurable goal: GIS of stormwater system created.

Schedule: The GIS mapping effort will be completed by the end of year 1 of the permit.

Responsible department/person: Environmental Planner.

Cost: The cost estimate to complete the City's GIS mapping is approximately \$200,000. This effort will be completed as part of the City's SRF-funded stormwater management plan.

BMP #3-4: Develop and implement a plan to identify and remove non-stormwater discharges to the MS4.

Description: Based on prioritized results from BMP #3-1, inspect storm drainage systems with evidence of contamination. Before conducting detailed and costly inspections, survey the area for obvious signs of contamination. Determine a method and staffing for bottom-up inspections of storm drain lines, develop notification and funding procedures for removing illicit connections, and develop and maintain a database showing illicit connections identified, located, and removed. Up to 6,000 linear feet of storm drain pipe will be investigated using TV-inspection equipment as part of the City's SRF-funded stormwater management planning. City-owned TV inspection equipment may be used to investigate additional storm drains or suspected illicit connections as needed.

Measurable goal: Number of illicit connections found and removed.

Schedule: By the end of the first permit year, prioritize outfalls, evaluate funding sources for removing illicit connections (City-funded or paid for by property owner), and develop a system for maintaining electronic records of the program. Conduct field investigations of prioritized area to locate and remove illicit connections within two years of each round of dry weather field screening.

Responsible department/person: Department of Public Works.

Cost: It is not possible to estimate the cost of illicit connection removal prior to investigating the extent of the problem. As a benchmark, other communities have estimated that it costs as much as \$12,000 to \$18,000 to locate an illicit connection (including dry weather field screening and field inspections), and \$4,000 to \$6,000 to remove and reconnect to the sewer.

BMP #3-5: Develop an ordinance that prohibits non-stormwater connections to the MS4, gives the City authority to access buildings to search for illicit connections, and allows the City to require redirection of any illicit connections found.

Description: Develop a draft ordinance that prohibits illicit connections to the MS4, allows the City to access buildings to search for illicit connections, and allows the City to require redirection of any illicit connections found.

Measurable goal: Draft ordinance developed and presented to Municipal Council.

Schedule: Develop draft ordinance by the end of the first year of the permit term. Present to Municipal Council annually thereafter until passed.

Responsible department/person: City Attorney/Department of Planning and Development/Department of Public Works.

Cost: 24 hours of staff time to develop a draft ordinance; 16 hours of staff time to present to Municipal Council.

BMP #3-6: Continue inspection of new construction for correct connection to the sanitary sewer.

Description: Continue to inspect all new construction (prior to occupation by residents) to ensure that the sanitary sewer was correctly connected to the City's sewer line. If an improper connection to the storm drain is found, the dwelling cannot be inhabited until the connection is redirected to the sewer.

Measurable goal: New construction inspected.

Schedule: Ongoing throughout permit term.

Responsible department/person: Department of Public Works/Department of Water and Wastewater.

Cost: 2 hours of staff time per inspection.

Section 4

Control Measure 4: Construction Site Runoff Control

Control Measure 4, Construction Site Runoff Control, is designed to reduce impacts to stormwater from construction sites greater than one acre in area.

To comply with control measure 4, the City must "... develop, implement, and enforce a pollutant control program to reduce pollutants in any stormwater runoff from construction activities that result in land disturbances of one or more acres."

The program for this control measure must include:

- An ordinance or other regulatory mechanism to require erosion and sediment controls
- Sanctions to ensure compliance (such as fines, permit denials, non-monetary penalties, etc.)
- Requirements for construction site operators to implement appropriate erosion and sediment control BMPs
- Procedures for site plan review that incorporate consideration of potential water quality impacts
- Requirements to control other wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste
- Procedures for receipt and consideration of information submitted by the public to the MS4 operators
- Procedures for site inspection and enforcement of control measures by the MS4 operators

The following best management practices (BMPs) for construction sites will be implemented to fulfill the requirements of Control Measure 4.

BMP #4-1: Develop a city-wide Construction Site Erosion and Sediment Control ordinance for construction sites greater than 1 acre in area.

Description: Develop and present a draft ordinance to Municipal Council to require project proponents to develop an Erosion and Sediment Control Plan (ESCP) and Waste Management Plan at construction sites greater than 1 acre in area.[1] The City could consider extending Performance Standard 8 of the Massachusetts Stormwater Management Policy to the entire City, rather than just the jurisdiction of the Conservation Commission. The City would need to determine the appropriate Board to have authority for ordinance enforcement. The ordinance should include provisions for enforcement and penalties for non-compliance (See BMP #4-2). The following BMPs should be required as appropriate at construction sites: site entrance stabilization, perimeter controls, covering of dirt piles and bare earth, storm drain inlet protection, construction sequencing, grading and slope stabilization (if needed), and street sweeping at the end of construction. The ordinance will be presented annually to Municipal Council until passed.

Measurable goal: Draft ordinance developed and presented to Municipal Council.

Schedule: Develop a draft ordinance by the end of the first year. Present annually (beginning in the second permit year) to Municipal Council until passed, and begin enforcement after the ordinance has been passed.

Responsible department/person: City Attorney/Department of Planning and Development.

Cost: 40 hours of staff time to prepare the ordinance; 20 hours of staff time for presenting to Municipal Council.

BMP #4-2: Require the construction site operator to submit monthly erosion and sediment control inspection reports to the City for sites greater than 1 acre.

Description: In addition to the City inspections of construction sites conducted prior to, during, and after construction, require the construction site operator to submit monthly erosion and sediment control inspection reports to the City. This BMP is contingent upon the City passing an ordinance requiring monthly submittals by the construction site operator for sites greater than 1 acre (see BMP #4-1).

Measurable goal: Inspection reports submitted to the City.

Schedule: Develop a procedure for receiving and reviewing monthly inspection reports from site operators by the end of the third year, and require monthly inspections and report submittals by site operators by the end of the fourth year.

Responsible department/person: Department of Public Works.

Cost: 8 hours of staff time to develop procedures for reviewing monthly inspection reports from site operators; 1 hour to review each monthly inspection report.

BMP #4-3: Review site plans for stormwater impacts.

Description: Review all construction site plans greater than 1 acre to be sure that adequate erosion and sediment controls will be in place during construction. This BMP is contingent upon the City passing an ordinance requiring site plan review for stormwater impacts for sites greater than 1 acre (see BMP #4-1).

Measurable goal: Number of site plans reviewed for erosion and sediment control.

Schedule: By the end of the second permit year, develop internal protocol for reviewing plans – including identification/training of appropriate board or committee. Begin site plan reviews for stormwater impacts by the end of the third permit year.

Responsible department/person: Environmental Planner/Planning Board.

Cost: 16 hours of staff time for developing review program; 12 hours of staff time per project.

BMP #4-4: Consideration of public input.

Description: Allow a public review comment period for stormwater management during the planning phase of construction projects disturbing more than 1 acre by placing a notice in the local newspaper. At every construction site, post a phone number that residents can call if they have questions or complaints about the site. This BMP is contingent upon the City passing an ordinance requiring consideration of public input for projects disturbing more than 1 acre (see BMP #4-1).

Measurable goal: Public review and comment periods held; signs posted at each construction site.

Schedule: By the end of the second permit year, begin placing notices in the newspaper to announce a review and comment period for construction projects disturbing more than 1 acre. By the end of the third permit year, post a phone number for residents to call at each construction site.

Responsible department/person: Environmental Planner/Planning Board.

Cost: One newspaper ad and one sign per construction project. Staff time for reviewing comments submitted by the public.

[1]

Performance Standard 8 states that: “erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.”

Section 5

Control Measure 5: Post-construction Stormwater Management in New Development and Redevelopment

To comply with the requirements of Control Measure 5, the City must “develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that result in land disturbances of one or more acres, including projects less than one acre that are part of a larger common plan of development or sale that discharge into the MS4. Specifically, MS4 operators are required to:

- Develop and implement strategies that include a combination of structural and/or non-structural BMPs appropriate for Attleboro
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects disturbing more than 1 acre
- Ensure adequate long-term operation and maintenance of BMPs.”

The following best management practices (BMPs) for new development and redevelopment will be implemented to fulfill the requirements of Control Measure 5.

Note that BMPs 5-1, 5-2, and 5-3 all require development and implementation of an ordinance. These three BMPs can all be addressed as parts of a single ordinance for stormwater management in new development and redevelopment.

[1]

BMP #5-1: Develop an ordinance to apply Performance Standards 2, 3, 4, 7, and 9 of the Massachusetts Stormwater Policy (MSP) to the developments disturbing more than 1 acre throughout the entire City. Present the ordinance to Municipal Council.

Description: Develop and present a draft ordinance to Municipal Council to apply Standards 2, 3, 4, 7, and 9 of the MSP to the entire City of Attleboro, and not only the area under the jurisdiction of the Conservation Commission or the Planning Board. The ordinance will specify which City Board will have responsibility for enforcement. The ordinance will be presented annually to Municipal Council until passed.

Measurable goal: Draft ordinance developed and presented to Municipal Council.

Schedule: Develop a draft ordinance by the end of the second year.

Responsible department/person: City Attorney/Planning Department.

Cost: 40 hours of staff time to develop a draft ordinance; 20 hours to process through Municipal Council.

BMP #5-2: Specify a stormwater BMP manual to be used for consistent design and performance

standards.

Description: As part of the ordinance described above, specify a technical stormwater BMP reference to be used for design and performance standards of all stormwater BMPs in the City (the Massachusetts DEP and CZM “Stormwater Management, Volume Two: Stormwater Technical Handbook,” March 1997, is recommended).

Measurable goal: BMP manual selected.

Schedule: Specify a stormwater BMP manual to be included in an ordinance by the end of the second permit year.

Responsible department/person: Environmental Planner.

Cost: 8 hours of staff time to evaluate different BMP manuals.

BMP #5-3: Ensure long-term maintenance of structural BMPs.

Description: As part of the ordinance described above, require project proponents to submit to the City a description of all new BMPs, including location, design and installation plans, vendor and manufacturer, and maintenance requirements. Require the project proponent to be responsible for future maintenance, or set up a trust fund to pay the City to conduct maintenance.

Measurable goal: Draft ordinance developed and presented to Municipal Council.

Schedule: By the end of the second permit year, include provisions in the ordinance for long-term BMP maintenance. After the ordinance is passed, begin BMP maintenance as required.

Responsible department/person: City Attorney/Planning Department.

Cost: Variable, depending on the number and type of BMPs.

[1]

These performance standards are: (2) Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development rates. (3) Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge from the pre-development or existing site conditions, based on soil type. (4) For new development, stormwater management systems must be designed to remove 80% of the average annual load (post-development conditions) of total suspended solids (TSS). (7) Redevelopment of previously developed sites must meet the stormwater management standards to the maximum extent practicable. However, if it is not practicable to meet all the standards, new (retrofitted or expanded) stormwater management systems must be designed to improve existing conditions. (9) All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.

Section 6

Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

Control Measure 6, Pollution Prevention/Good Housekeeping for Municipal Operations, requires the City to develop and implement a program to prevent or reduce pollution in stormwater from municipal operations.

To comply with this minimum control measure, the City must develop and implement an “operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing stormwater from municipal operations.” The following steps are encouraged:

- Implement maintenance activities, maintenance schedules, and inspection procedures for all structural and non-structural stormwater controls to reduce floatables and other pollutants to the storm drain system
- Implement controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, and other areas operated by the MS4
- Adopt procedures for the proper disposal of waste removed from the storm drain system and from the areas listed above (such as street sweepings, catch basin residuals)
- Adopt procedures to ensure that new flood management projects are assessed for impacts on water quality, and existing projects are assessed for incorporation of additional water quality protection devices or practices

The following pollution prevention/good housekeeping best management practices (BMPs) will be implemented to fulfill the requirements of Control Measure 6. The City will also be implementing a stormwater improvements project at the Wall Street Highway Yard. This \$260,000 project, partially funded through DEP’s 319 Nonpoint Source Competitive Grant program, will result in the implementation of several stormwater management measures designed to reduce nonpoint source pollution to the Tenmile River. These measures are covered under a separate BMP below.

BMP #6-1: Employee training program.

Description: Continue existing practices of providing training for DPW employees, and expand as needed to ensure that each employee has one training course per permit term on a topic related to stormwater. The training will be limited to those who would benefit from the training in performing their daily tasks (i.e. DPW field crews and maintenance staff). Office employees (i.e. clerks, accountants, book keepers) will not receive the training, but will be given brochures on the hazards associated with illegal discharges and the improper disposal of hazardous wastes (see BMP #1-1).

Measurable goal: Number/percent of DPW employees who receive stormwater training each year.

Schedule: Ongoing during permit term.

Responsible department/person: Department of Public Works.

Cost: 8 to 24 hours of training time per employee per permit term, depending on the seminar/course.

BMP #6-2: Continue street and parking lot sweeping.

Description: Continue sweeping downtown areas twice weekly and all streets city-wide each spring to remove accumulated sand. Review current practices and equipment needs annually to determine if improvements may be made in terms of efficiency and effectiveness. Maintain records of sweeping schedule and daily volume of residuals collected. Sweep municipally-owned parking lots once in spring to remove winter sand. Ensure proper disposal of residuals.

Measurable goal: All streets and municipal parking lots swept in spring; downtown streets swept twice weekly throughout the year, weather permitting; tons of materials removed from roadways annually.

Schedule: Ongoing throughout permit term.

Responsible department/person: Department of Public Works.

Cost: As currently budgeted, with an additional 48 hours of staff time per year to maintain records and review current practices.

BMP #6-3: Storm drain maintenance.

Description: Clean all catch basins at least once every three years, and clean drain pipes as necessary. Once the GIS system is available, develop a maintenance schedule and drain identification system in GIS and utilize GIS mapping to prioritize and track cleaning. Evaluate current practices and equipment needs annually to determine if improvements may be made in terms of efficiency and effectiveness. Keep records of catch basin residuals volumes on a daily basis. Note catch basins with exceptionally large residual volumes; these basins will be prioritized for more frequent cleaning. Ensure proper disposal of residuals.

Measurable goal: Percent of catch basins cleaned annually.

Schedule: Continually throughout permit term.

Responsible department/person: Department of Public Works.

Cost: As currently budgeted, plus 120 hours per year staff time for records maintenance, GIS mapping, and prioritizing catch basin cleaning routes.

BMP #6-4: Evaluate street sweeping and catch basin cleaning equipment.

Description: Given that the current city-owned equipment is old, evaluate equipment used to clean streets and catch basins to determine if repair, replacement or upgrades would improve efficiency of cleaning operations. If it is determined that additional equipment is needed to improve efficiency and effectiveness of operations, pursue purchasing new equipment.

Measurable goal: Evaluation of existing equipment.

Schedule: Ongoing throughout permit term.

Responsible department/person: Department of Public Works.

Cost: Depends on equipment needs. A catch basin cleaning vehicle costs approximately \$180,000. A street sweeping vehicle costs approximately \$150,000 to \$200,000.

BMP #6-5: Roadway deicing.

Description: Continue existing roadway deicing procedures. Continue to use a sand/salt mixture as appropriate for normal deicing procedures. Continue to keep salt stored in a covered facility. Minimize the amount of time salt/sand mixtures are left uncovered. Do not apply salt in salt restricted areas (i.e. water supply zones such as near the Manchester Pond and Orrs Pond reservoirs). Post and maintain signs in salt restricted areas indicating that salt use is not allowed. Evaluate current practices and equipment needs annually to determine if improvements can be made in terms of efficiency and effectiveness. Calibrating salt spreaders and minimizing salt use as appropriate are examples of effective deicing practices. Also, monitor industry standards and practices to continually evaluate new technologies and products that cost-effectively minimize deicer usage or environmental impacts of deicers, and modify deicing practices as appropriate.

Measurable goal: Reduction in the amount of deicers used (compared to years with similar snowfall and deicer demand) and environmental impacts of deicers.

Schedule: Winter of each permit year.

Responsible department/person: Department of Public Works.

Cost: 40 hours of additional staff time per year to maintain records, in addition to current budget. 40 hours of additional staff time to monitor industry practices and incorporate appropriate changes.

BMP #6-6: Proper snow disposal.

Description: Identify designated snow disposal areas that meet state guidelines for proper snow disposal.

Measurable goal: Designated snow disposal areas identified.

Schedule: End of second permit year.

Responsible department/person: Department of Public Works.

Cost: 8 hours of staff time.

BMP #6-7: Continue spill prevention and response training at the DPW facility.

Description: Continue practice of training DPW workers in spill prevention and response. Currently, an outside vendor is contracted to train employees on appropriate spill prevention and response measures as needed according to employee turnover.

Measurable goal: Periodic training of employees.

Schedule: Train staff as needed.

Responsible department/person: Department of Public Works/Health Department.

Cost: . Approximately \$1,500 per year is paid every two to three years for an outside vendor to conduct the training program.

BMP #6-8: Develop a written spill prevention and response plan for the DPW facility.

Description: Develop a written spill prevention and response plan for the DPW facility. Update the written plan annually.

Measurable goal: Written spill prevention and response plan developed and updated annually.

Schedule: Develop written spill prevention and response plan by the end of the second permit year and update plan annually thereafter.

Responsible department/person: Department of Public Works/Health Department.

Cost: Development of a written spill prevention and response plan is estimated to require 80 hours of staff time. Updating the written spill prevention and response plan is estimated to require 20 hours per year.

BMP #6-9: Continue to maintain hazardous materials inventory for materials used or generated by the City.

Description: Continue to maintain an inventory of hazardous waste generated by the City and materials used by the City that could contaminate stormwater to aid in the management of their use.

Measurable goal: Maintenance of hazardous materials inventory system.

Schedule: Ongoing throughout permit term.

Responsible department/person: Department of Public Works/Fire Department/Health Department.

Cost: As currently budgeted.

BMP #6-10: Minimize impacts from vehicle maintenance.

Description: Continue minimizing impacts from vehicle maintenance through employee training and proper hazardous materials management and use reduction.

Measurable goal: Reduction in amount of hazardous materials used.

Schedule: Ongoing throughout permit term.

Responsible department/person: Department of Public Works.

Cost: As currently budgeted.

BMP #6-11: Minimize impacts from vehicle washing.

Description: Investigate and evaluate vehicle washing practices for City departments with vehicles (i.e. DPW, Police Department). Educate departments on proper vehicle washing practices to minimize water quality impacts. Modify practices as needed. Powerwash vehicles without soap where practical. Use biodegradable, non-phosphorus soap when soap is required for vehicle washing.

Measurable goal: Investigation with specific recommendations completed. Resulting implementation of recommendations scheduled. Decline in use of soap. Switch to biodegradable soap.

Schedule: By the end of the third permit year, complete investigation and evaluation of vehicle washing practices, educate City departments on proper vehicle washing practices, and switch to phosphate-free biodegradable soap.

Responsible department/person: Department of Public Works/Police Department.

Cost: 80 hours for the investigation, evaluation, and education efforts.

BMP #6-12: Park and landscape maintenance.

Description: Train staff to minimize application of herbicides, pesticides, and fertilizers at parks, playing fields, and other municipally owned and maintained properties. Keep maintenance records.

Measurable goal: Amount of herbicides/fertilizers used.

Schedule: Conduct training during winter of second permit year, then practice green landscaping continually throughout permit term.

Responsible department/person: Park and Forestry Department/Recreation Department.

Cost: 16 hours per year for record-keeping, in addition to the current budget.

BMP #6-13: Continue tree planting and maintenance program.

Description: Continue practice of planting approximately 50 trees per year, maintaining trees as needed, and replacing trees that are cut down.

Measurable goal: Number of trees planted.

Schedule: Continually throughout permit term.

Responsible department/person: Park and Forestry Department/Recreation Department.

Cost: As currently budgeted.

BMP #6-14: Illegal dumping control.

Description: Continue practice of posting and maintaining signs at the end of selected dead end streets to deter illegal dumping. Identify other possible locations where illegal dumping could occur and install no dumping signs. The Health Department currently investigates sites where illegal dumping has been reported and supplies “no dumping” signs to the DPW for posting at these sites. Maintain records of all complaints, responses, clean-up efforts, and materials collected. The Health Department

also provides regularly scheduled waste collection services to discourage illegal dumping (see BMPs 6-14 and 6-15).

Measurable goal: Number of signs posted; number of sites cleaned up.

Schedule: Inventory areas by the end of the second permit year and maintain records thereafter.

Responsible department/person: Health Department/Department of Public Works.

Cost: 24 hours per year for record keeping; cost of one or two signs per dumping area.

BMP #6-15: Continue to hold Annual Household Hazardous Waste Collection Day.

Description: The Health Department currently holds an annual Household Hazardous Waste Collection Day on the second Saturday in June. Pesticides, herbicides, insecticides, pool chemicals, adhesives, epoxy, roofing tar, and wood preservatives are among the items collected at this annual event.

Measurable goal: Household Hazardous Waste Collection Day held annually.

Schedule: Once per year during each year of the permit term.

Responsible department/person: Health Department.

Cost: As currently budgeted.

BMP #6-16: Continue to provide monthly drop off days for paint products and automotive waste and collection services for other waste products throughout the year.

Description: The Health Department currently provides monthly waste drop offs for residents on the first Saturday of the month from April through November. Tires, batteries, oil, paint products, fluorescent lamps, propane tanks, and thermometers are among the items accepted at these monthly drops offs. Bulk items including appliances, metal items, TV's, computer monitors, couches, mattresses, box springs, toilets, and sinks are picked up by appointment throughout the year. Yard waste is also collected periodically throughout the year.

Measurable goal: Monthly paint product and automotive waste drop offs for residents provided during non-winter months. Bulk items collected by appointment throughout the year.

Schedule: Continually throughout permit term.

Responsible department/person: Health Department.

Cost: As currently budgeted.

BMP #6-17: Continue enforcement of pet waste pick-up ordinance. Empty trash barrels frequently to encourage proper disposal.

Description: The City enforces a local ordinance that requires residents to pick up after their pets, punishable by a \$25 fine. Trash barrels in public areas should be emptied frequently to encourage proper disposal.

Measurable goal: Reduction in complaints, if any, of pet waste in public areas; frequency of trash barrel emptying.

Schedule: Throughout each year of the permit term.

Responsible department/person: Health Department/Animal Control Officer/Department of Public Works/ Park and Forestry Department/Recreation Department.

Cost: As currently budgeted.

BMP #6-18: Implement stormwater improvements at the City's Wall Street Highway Yard designed to reduce nonpoint source pollution to the Tenmile River.

Description: The City's Wall Street Highway Yard Stormwater Improvements Project, partially funded by DEP's 319 Nonpoint Source Competitive Grant program, includes implementation of structural and non-structural BMPs to improve water quality by reducing non-point source pollution entering the Tenmile River from the site. Structural stormwater management measures to be implemented include the installation of three new storm drainage systems connected to proprietary stormwater treatment systems, a perimeter sand filter, two individual biofiltration systems, and a canopy to cover an existing fuel island. Also, a riparian buffer will be reestablished, and general good housekeeping practices and pollution prevention measures will be maintained. Operation and Maintenance Plans for all facilities will be developed to ensure that systems function as designed and an employee training program will be implemented to ensure operation and maintenance of the BMPs are carried out properly. Project success will be measured through pre- and post-project water quality monitoring.

Measurable goal: Construction of stormwater improvement projects.

Schedule: Completion of final design and permitting is planned for spring 2003. Completion of construction is planned for summer 2004.

Responsible department/person: Department of Public Works/Environmental Planner.

Cost: The total cost of the project is estimated at \$260,000. Approximately 60 percent of this cost, or \$155,000, is funded by DEP's 319 grant. The balance (\$105,000) will be funded by the City.

BMP #6-19: Enter into an agreement with the Historic Preservation Officer to mitigate potential impacts from stormwater discharges immediately upstream of the pond in the Blackinton Houses and Park Historic Site.

Description: The Blackinton Houses and Park located on North Main Street is listed on the National Register of Historic Places. A pond within the park, known as Blackinton Pond, has been documented to have sedimentation issues. The pond is an impoundment of the Bungay River, which is probably the primary source of sedimentation. However, it is likely that two storm drain outfalls from North Main Street just upstream of the pond also contribute sediment. Since these stormwater discharges may affect the historic site, the City must obtain a written agreement with the Historic Preservation Officer at the Massachusetts Historic Commission to meet eligibility requirements for the EPA Final NPDES Phase II Stormwater Permit, as described in Addendum B of the Final Rule. This BMP will involve obtaining a written agreement with the Historic Preservation Officer, which outlines the measures the City will follow to mitigate or prevent potential adverse impacts from the stormwater discharges

immediately upstream of Blackinton Pond. The City has already developed a conceptual design to mitigate potential adverse impacts. The City is pursuing funding for implementation of the design, and is also looking into dredging the pond and improving the landscape of the park.

Measurable goal: Written agreement with the Historic Preservation Officer obtained and appended to the SWMP.

Schedule: Enter into agreement by the end of the second permit year.

Responsible department/person: Environmental Planner.

Cost: 60 hours of staff time to develop, negotiate and document the agreement with the Historic Preservation Officer.

Section 7

Permit Eligibility

This section assesses Attleboro's NPDES Phase II general permit eligibility with respect to endangered species, historic places, and impaired waters.

The Phase II rule prohibits stormwater discharges (or discharge-related activities) that "are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the federal Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA." The rule also prohibits discharges that jeopardize Essential Fish Habitats, adversely affect properties listed (or eligible to be listed) on the National Register of Historic Places, or that cause or contribute to instream exceedances of water quality standards. If a municipality does not meet these requirements, it must apply for the more stringent individual permit, rather than the general permit.

Attleboro meets eligibility requirements for the general permit, as detailed below.

7.1 Endangered Species

Addendum A to the EPA Final NPDES Phase II Stormwater Permit (Final Rule) effective May 1, 2003 requires that activities regulated by the small MS4 (municipal separate storm sewer systems) general permit do not adversely affect federally protected species or their critical habitat. Small MS4 operators need to assess the impacts of their stormwater discharges, allowable non-stormwater discharges, and discharge related activities on federal protected species and their habitat.

Addendum A of the Final Rule presents 5 criteria to determine whether or not an applicant can meet the Endangered Species Act (ESA) requirements. Criterion A confers eligibility by documenting the absence of federally protected species or designated critical habitat in or in the proximity of the MS4 community or the regulated portion of the community, or at discharge points where authorized discharges reach the receiving waters. This Criterion is applicable to Attleboro.

In accordance with the guidance presented in Addendum A, applicable published information regarding the occurrence of federally protected (threatened or endangered) species or their critical habitat in the City of Attleboro or proximate to where authorized discharges reach the receiving waters was reviewed. Lists of federally protected species within the appropriate county were utilized, and the EPA list was cross-referenced with the municipal list of state and federally protected species available through the Massachusetts Natural Heritage and Endangered Species Program (NHESP). Where necessary, the locations of estimated habitats of state protected species as published by NHESP's Habitat Atlas 2000-2001 edition were also reviewed. Documents utilized to complete the assessment are included in Appendix C.

According to the United States Environmental Protection Agency's (USEPA) county atlas, the Piping Plover and the Bald Eagle are federally endangered in Bristol County. Neither of these species are known to be seen in Attleboro. The Piping Plover in particular is typically found near coastal beaches. There are no beaches in Attleboro.

Based on review of available information, there are no federally endangered or threatened species, critical habitat of federally protected species in the MS4 community or regulated portions thereof, or

points where authorized discharges reach the receiving waters. Therefore, the City of Attleboro meets the ESA eligibility requirements of the Final NPDES Phase II Stormwater Rule pursuant to Criteria A as described in Addendum A to the Final Rule.

7.2 Historic Places

The City of Attleboro has ten properties listed on the National Register of Historic Places. These properties are listed in the following table.

Name	Address	Date Listed
Blackinton Houses and Park	N. Main St.	4/20/79
Capron House	42 North Ave	7/21/78
East Attleborough Academy	28 Sanford St.	4/4/85
First Parsonage for Second East Parish Church	41 S. Main St.	4/2/80
Hebronville Mill Historic District	Knight Ave., Read and Phillip Sts.	5/17/84
Makepeace, D.E., Company	46 Pine St.	7/18/85
Northbound and Southbound Stations	1 and 2 Mill St.	1/5/89
Robinson, Capt. Joel, House	111 Rocklawn Ave.	11/20/78
Sadler, Herbert A., House	574 Newport Ave.	10/21/82
US Post Office – Attleboro Main	75 Park St.	10/19/87

Addendum B of the EPA Final NPDES Phase II Stormwater Permit outlines the procedure for establishing how Attleboro can meet the permit eligibility criteria for protection of historic properties. It provides three scenarios:

Under Scenario 1, the City is eligible for the permit if there are no historic properties identified in the path of the discharges from the City’s drainage system. This is true for eight of the ten listed properties.

Under Scenario 2, the City is eligible for the permit if the historic property is in the path of a discharge, but will not be adversely affected. This is the case for the Hebronville Mill Historic District. The Hebronville Mill Historic District is located on the banks of the Tenmile River near the south boundary of the City. A storm drain discharges into a manmade channel into the river just upstream from the mill building. Based on a visual inspection, the stormwater outfall does not appear to pose any adverse impacts to the District. The riverbanks and mill buildings were designed to accommodate flows from the river, including from the storm drain. There was no evidence of erosion, sedimentation or scour from the storm drain outfall. No impacts from the outfall on the historic site were observed.

Under Scenario 3, the City is eligible for the permit when an historic property is in the path of a discharge, and the discharge has the potential to affect the historic property if the following conditions are met:

- The City must obtain and comply with a written agreement with the Historic Preservation Officer that outlines the measures the City will follow to mitigate or prevent adverse impacts.

- The contents of the written agreement must be included in the City's Stormwater Management Program.

Scenario 3 applies to a pond located on the Blackinton Houses and Park site, an approximately 0.75 acre property owned by the City, located on North Main Street where it crosses the Bungay River. There are two storm drain outfalls which discharge flow from North Main Street to a channelized portion of the river downstream of the World War I Memorial Bridge and upstream of a pond within Blackinton Park. The pond, known as Blackinton Pond, is an impoundment of the Bungay River. There is documentation of sedimentation in the pond. The primary source of sedimentation is probably the Bungay River, itself. However, it is likely that the storm drains also contribute sediment to the pond.

Recognizing these storm drains as potential sediment sources, the City retained the services of a professional engineer to develop a conceptual design to mitigate stormwater impacts. The design was completed in May 2000, and included measures such as deep sump catch basins, stormwater treatment devices, and other means to reduce loadings to the receiving waters. In addition to these stormwater control measures, the City has also investigated dredging the pond. The City has obtained all of the necessary permits for the dredging and a valid order of conditions was granted. The City is pursuing funding for implementation of the stormwater controls and dredging projects, and is also looking into further improving the landscape of the park. (The City restored the banks of the pond in the mid-1990s through a Massachusetts Department of Energy Management (DEM) Lakes and Ponds Program grant.) The City has included a BMP (BMP 6-19) in this plan to enter into a written agreement with the Historic Preservation Officer which outlines the measures the City will follow to mitigate or prevent adverse impacts.

The City meets the NHPA eligibility criteria for 8 historic properties under Scenario 1 of Addendum B; 1 historic property under Scenario 2; and 1 historic property under Scenario 3. The City therefore meets the NHPA eligibility requirements for the permit.

7.3 Impaired Waters

DEP is responsible for identifying waters in Massachusetts that are impaired, and developing a plan to bring them back into compliance with state Surface Water Quality Standards. The list of impaired waters, also known as the "303d list," identifies impaired river, lake, and coastal waters and the reasons for impairment.

Nine water bodies that lie within or border the City of Attleboro are listed on the Proposed Massachusetts Year 2002 Integrated List of Waters (303d list). These are:

- Tenmile River, for metals, nutrients, siltation, organic enrichment/low dissolved oxygen, pathogens, noxious aquatic plants, and turbidity
- Sevenmile River, for organic enrichment/low dissolved oxygen and pathogens
- Dodgeville Pond (impoundment of the Tenmile River), for nutrients, pathogens, noxious aquatic plants, and turbidity
- Farmers Pond (impoundment of the Tenmile River), for nutrients and noxious aquatic plants
- Hebronville Pond (impoundment of the Tenmile River), for noxious aquatic plants

- Mechanics Pond (impoundment of the Tenmile River), for nutrients, pathogens, and noxious aquatic plants
- Luther Reservoir (impoundment of the Sevenmile River), for turbidity
- Lake Como (impoundment of an unnamed tributary to the Sevenmile River), for noxious aquatic plants and turbidity
- Speedway Brook, for metals, nutrients, siltation, organic enrichment/low dissolved oxygen, pathogens, and turbidity

The Ten Mile Reservation Pond (MA 52044-2002) was also listed on the 303d list for Attleboro (for noxious aquatic plants). However, this water body is located almost entirely in Rhode Island with a small portion extending into Seekonk, Massachusetts. Based on consultation with DEP, it is unclear why this water body has been linked to Attleboro on the 303d list. For this reason, it has not been included in the list of impaired water bodies within or along the border of Attleboro.

Once a waterbody is listed on the 303d list, DEP is required to develop a "pollution budget" designed to restore the health of the impaired waterbody. This budget is referred to as a Total Maximum Daily Load (TMDL). The process of developing TMDLs includes identifying the causes or types of pollutants, the sources of the pollutants considering both direct point source discharges and indirect non-point discharges, and the maximum pollutant amount that can be discharged to a specific water body to meet water quality standards. The TMDL process also includes developing a plan to meet the targeted discharge amounts.

If a TMDL has been developed by DEP and approved for any water body in a municipality, then the Phase II stormwater permittee must include BMPs that will specifically address the impaired water body and be consistent with the TMDL. TMDLs have not been developed for any of the impaired water bodies in Attleboro. Nonetheless, many of the BMPs contained in Attleboro's stormwater management plan help mitigate against the priority pollutants listed for the impaired water bodies in the City since stormwater often contributes pollutants. For example, noxious aquatic plants, organic enrichment, low dissolved oxygen, metals, and nutrients may be caused by illegal sewage discharges or overuse of fertilizers. Pathogens may be caused by illicit connections to storm drains, pet waste, and wildlife populations (e.g. large flocks of Canada geese). Siltation and turbidity may be caused by erosion and sedimentation.

The following BMPs will help mitigate against the priority pollutants listed above:

- BMP #1-1: Stormwater education for residents and businesses
- BMP #1-2: Stormwater education for those with access to the City website
- BMP #1-3: Promote awareness of stormwater issues while cleaning up litter and debris from river reach
- BMP #1-4: Stormwater education for school children, which can have long term benefits
- BMP #1-5: Stormwater education for community groups
- BMP #1-6: Educate dog owners about picking up dog waste

- BMP #1-7: Install and maintain signs for stormwater management and pet waste clean-up to reduce pollutant loading to rivers
- BMP #1-8 & 1-9: Staff tables at “Wednesday Night Market” and Earth Day events.
- BMP #1-10, 1-11, & 1-12: Promote public awareness of Stormwater Management Plan and stormwater management issues through annual televised updates or informational postings on local access cable TV.
- BMP #1-13: Post signs and develop and distribute educational brochures on the City’s Wall Street Highway Yard Stormwater Improvements project.
- BMP #2-2: Stencil storm drains with “don’t dump” message
- BMP #3-1: Conduct dry weather outfall screening
- BMP #3-2 & 3-3: Map the outfalls, receiving waters, and stormwater collection system
- BMP #3-4: Develop and implement a plan to identify and remove non-stormwater discharges to the MS4
- BMP #3-5: Develop an ordinance that prohibits non-stormwater connections to the MS4, gives the City authority to access buildings to search for illicit connections, and allows the City to require redirection of any illicit connections found
- BMP #3-6: Continue inspection of new construction for correct connection to the sanitary sewer
- BMP #4-1: Develop a city-wide Construction Site Erosion and Sediment Control ordinance for construction sites greater than 1 acre in area
- BMP #4-2: Require the construction site operator to submit monthly erosion and sediment control inspection reports to the City
- BMP #4-3: Review site plans for stormwater impacts
- BMP #5-1: Develop an ordinance to apply Massachusetts Stormwater Policy performance standards to developments disturbing more than one acre
- BMP #5-3: Ensure long-term maintenance of structural BMPs
- BMP #6-1: Continue employee training
- BMP #6-2: Continue street and parking lot sweeping
- BMP #6-3: Storm drain maintenance
- BMP #6-5: Roadway deicing
- BMP #6-6: Proper snow disposal
- BMP #6-7: Continue spill prevention and response measures for the DPW facility

- BMP #6-10 & 6-11: Minimize impacts from vehicle washing and maintenance
- BMP #6-12: Park and landscape maintenance
- BMP #6-13: Continue tree planting and maintenance program
- BMP #6-14: Illegal dumping control
- BMP #6-15: Continue holding annual Household Hazardous Waste Collection Day
- BMP #6-16: Continue to provide monthly drop-offs for paint products and automotive waste and collection services for other waste products throughout the year
- BMP #6-17: Continue enforcement and encouragement of pet waste pick-up
- BMP #6-18: Implement stormwater improvements at the City's Wall Street Highway Yard designed to reduce nonpoint source pollution to the Tenmile River.

7.4 Conclusions

The City of Attleboro is in compliance with NPDES Phase II permit eligibility requirements. Application for the general permit is therefore appropriate.

Section 8

Receiving Waters and Priority Resource Areas

One of the goals of the SWMP is to protect water quality in the MS4's receiving waters. This section lists the receiving waters in Attleboro, and describes priority areas in the City that will be the focus of the SWMP.

8.1 Receiving Waters

Attleboro's MS4 discharges stormwater to the following receiving waters:

- Tenmile River
- Sevenmile River
- Dodgeville Pond
- Farmers Pond
- Hebronville Pond
- Mechanics Pond
- Luther Reservoir
- Lake Como
- Speedway Brook
- Manchester Pond
- Orrs Pond
- Cranberry Ponds
- Sweeden's Swamp
- Fourmile Brook
- Brook tributary to Tenmile River
- Brook tributary to Sevenmile River
- Thacher Brook
- Bliss Brook
- Streams tributary to Thacher Brook
- Chartley Brook

- Chartley Pond
- Coopers Pond
- Bungay River
- Blackstone River
- Happy Hollow Pond
- Robin Hollow Pond
- Unnamed ponds and wetlands

These water bodies are in the Tenmile River, Blackstone River, Taunton River, and Narragansett Bay and Mt. Hope Bay Shore Watersheds.

8.2 Priority Resource Areas

No public swimming beaches, shellfishing areas, or coldwater fisheries are present within Attleboro. The Sevenmile River upstream of the Orrs Pond Reservoir outlet, including Manchester Pond Reservoir and Luther Reservoir, is a public water supply and Outstanding Resource Water.

As noted in Section 7.3, nine water bodies within or adjacent to Attleboro are on the 303d list of impaired waters. These are:

- Tenmile River, for metals, nutrients, siltation, organic enrichment/low dissolved oxygen, pathogens, noxious aquatic plants, and turbidity
- Sevenmile River, for organic enrichment/low dissolved oxygen and pathogens
- Dodgeville Pond (impoundment of the Tenmile River), for nutrients, pathogens, noxious aquatic plants, and turbidity
- Farmers Pond (impoundment of the Tenmile River), for nutrients and noxious aquatic plants
- Hebronville Pond (impoundment of the Tenmile River), for noxious aquatic plants
- Mechanics Pond (impoundment of the Tenmile River), for nutrients, pathogens, and noxious aquatic plants
- Luther Reservoir (impoundment of the Sevenmile River), for turbidity
- Lake Como (impoundment of an unnamed tributary to the Sevenmile River), for noxious aquatic plants and turbidity
- Speedway Brook, for metals, nutrients, siltation, organic enrichment/low dissolved oxygen, pathogens, and turbidity

Because of their listing as impaired waters, and because of their aesthetic value, these water bodies will be considered priority resource areas and will be the focal point for the City's Stormwater Management

Plan. The BMPs that target these water bodies are listed below. It is important to note that all of the BMPs included in the Stormwater Management Plan will help improve water quality in the water bodies in and around Attleboro. The list below represents those BMPs that may be tailored specifically to target the priority water bodies. The more universal BMPs (e.g. stormwater management ordinances, construction site erosion and sediment controls, appropriate hazardous waste management and collection, etc.) have an equal effect on water bodies throughout the City and so are not listed below as being specifically targeted towards the priority resource areas.

- BMP #1-1 & #1-2: Stormwater education – educational materials will specifically mention the priority water bodies, and how stormwater impacts them. The materials may include photographs of these water bodies.
- BMP #1-3: River Cleanup Days – Cleanup days will be targeted for the priority water bodies.
- BMP #1-4: Stormwater education program for school children – the priority water bodies will be used as examples.
- BMP #1-5: Stormwater education for local groups - the priority water bodies will be used as examples and presentations will be targeted to groups that may impact these priority water bodies.
- BMP #1-6: Educate dog owners about picking up dog waste – literature will specifically mention the priority water bodies.
- BMP #1-7: Install and maintain signs for pet waste clean-up – locations near the priority water bodies will be targeted first.
- BMP #1-8 & 1-9: Staff tables at “Wednesday Night Market” and Earth Day events – information disseminated at these events will mention the priority water bodies.
- BMP #1-10, 1-11, & 1-12: Promote public awareness of Stormwater Management Plan and stormwater management issues through annual televised updates or informational postings on local access cable TV – the priority water bodies will be specifically discussed.
- BMP #1-13: Post signs and develop and distribute educational brochures on the City’s Wall Street Highway Yard Stormwater Improvements project – the signage and brochures will focus on the Tenmile River since the facility is located adjacent to the river. The projects will directly improve water quality in the Tenmile River by reducing nonpoint pollutant discharges from the facility.
- BMP #2-2: Stencil storm drains with “don’t dump” message – storm drains that discharge to the priority water bodies will be stenciled first.
- BMP #3-1: Conduct dry weather outfall screening – storm drains that discharge to the priority water bodies will be screened first.
- BMP #3-2 & 3-3: Map the outfalls, receiving waters, and stormwater collection system – storm drains that discharge to the priority water bodies will be entered in the GIS first.
- BMP #3-4: Develop and implement a plan to identify and remove non-stormwater discharges to the MS4 – any illicit connections found that discharge to the priority water bodies will be targeted first.

- BMP #6-2: Street and parking lot sweeping – streets and municipally-owned parking lots that drain to the priority water bodies will be given priority for sweeping, and, when possible, will be swept additional times each year.
- BMP #6-3: Storm drain maintenance – catch basins and drain pipes that discharge to the priority water bodies will have highest priority for cleaning and repairs.
- BMP #6-5: Roadway deicing – when deicing, special attention will be given to roads that drain to the priority water bodies (minimal use of deicers)
- BMP #6-6: Proper snow disposal – areas identified for snow disposal will be located away from priority water bodies.
- BMP #6-12: Park and landscape maintenance – landscaped areas that abut the priority water bodies will receive minimal fertilizer applications and will be targeted for other green landscaping techniques (native plantings, less frequent mowing, etc.)
- BMP #6-14: Illegal dumping control – areas with illegal dumping that abut the priority water bodies will be targeted for sign posting, cleanup, and monitoring.
- BMP #6-18: Implement stormwater improvements at the City’s Wall Street Highway Yard designed to reduce nonpoint source pollution to the Tenmile River - the projects will directly improve water quality in the Tenmile River.

**Table A-1
Summary of BMPs and Anticipated Additional Costs (Person-Hours) for Stormwater Management Plan Implementation**

BMP ID	BMP	Responsible Department	Estimated Hours Required						Other Costs/Comments
			Year 1	Year 2	Year 3	Year 4	Year 5	Total	
	Public Education:								
	Annual report to EPA and DEP	Environmental Planner		32	32	32	32	32	128
1-1	Article/brochure about stormwater mailed to residents and businesses	Environmental Planner	24	24	24	24	24	24	120
1-2	Update City website to include information on stormwater management issues	Environmental Planner/Conservation Commission	24	24	24	24	24	24	120
1-3	Sponsor Cleanup Days for rivers and water bodies within City limits	DPW/Health Dept/Park & Forestry Dept		48	48	48	48	48	192
1-4	Stormwater education program for school children	Environmental Planner	24	8	8	8	8	8	56
1-5	Present stormwater management issues to organizations in the City	Environmental Planner	26	10	10	10	10	10	66
1-6	Educate dog owners about picking up dog waste	Health Dept/City Clerk	16	16	16	16	16	16	80
1-7	Install and maintain stormwater and pet waste clean-up signs at schools and parks	Park & Forestry/Recreation Department							Variable
1-8	Staff a table with information about stormwater at Earth Day event each year	Health Dept	24	16	16	16	16	16	88
1-9	Continue to staff a table at weekly "Wednesday Night Market". Expand information dispensed to include stormwater-related topics.	Health Dept	24	40	40	40	40	40	184
1-10	Annual update of the Stormwater Management Plan at a televised Municipal Council meeting.	Environmental Planner/DPW		16	16	16	16	16	64
1-11	Appear on local access television talk show on City issues to discuss stormwater management issues.	Planning Dept/Health Dept/DPW	16	16	16	16	16	16	80
1-12	Post information on stormwater management issues on local access television.	Environmental Planner	48	24	24	24	24	24	144
1-13	Post signs and develop and distribute brochures on Wall Street Highway Yard Stormwater Improvements project	DPW/Environmental Planner							Total project cost for all improvements is \$260,000. \$155,000 is funded by DEP's 319 grant. \$105,000 is funded by City.
	Public Participation:								
2-1	Comply with state public notification guidelines at MGL Ch. 39 Section 23B.	DPW/Environmental Planner/Health Dept							Assume hours will be absorbed within normal routine of staff involved
2-2	Stencil catch basins with "don't dump" message.	Department of Public Works		24	24	24	24	24	96 \$400 for materials
	Illicit Discharge Detection & Elimination:								
3-1	Conduct dry weather outfall screening	DPW							0 Approximately \$12,000. SRF-funded.
3-2	Map stormwater outfalls and receiving waters	Environmental Planner							0 Approximately \$7,500. SRF-funded.
3-3	Map the stormwater collection system in a GIS	Environmental Planner							0 Approximately \$200,000. SRF-funded.

**Table A-1
Summary of BMPs and Anticipated Additional Costs (Person-Hours) for Stormwater Management Plan Implementation**

BMP ID	BMP	Responsible Department	Estimated Hours Required						Other Costs/Comments
			Year 1	Year 2	Year 3	Year 4	Year 5	Total	
3-4	Develop and implement plan to identify and remove non-stormwater discharges	Department of Public Works							Variable; could range between \$16,000 and \$24,000 to remove an illicit connection
3-5	Develop ordinance that prohibits non-stormwater connections to the MS4, gives the City authority to access buildings to search for illicit connections, and allows the City to require redirection of any illicit connections found.	City Attorney/Planning Dept/DPW	24	16				40	
3-6	Continue inspection of new construction for correct connection	DPW/Dept of Water and Wastewater							Variable; estimate 2 hours of time per inspection
	Construction Site Runoff Control								
4-1	Construction site ESC ordinance for construction sites greater than 1 acre in area	City Attorney/Planning Dept	40	20				60	
4-2	Require construction site operator to submit monthly erosion and sediment control inspection reports for sites greater than 1 acre.	DPW			8			8	Variable. One hour for review of each plan.
4-3	Review site plans for stormwater impacts	Environmental Planner/Planning Board		16				16	Variable. 12 hours per project
4-4	Consider public input	Environmental Planner/Planning Board							Variable. One newspaper ad and one sign per project. Time for reviewing public comments.
	Post Construction Runoff Control:								
5-1	Develop ordinance to apply Standards 2, 3, 4, 7, and 9 of the Massachusetts Stormwater Policy to the entire City. Present to Municipal Council.	City Attorney/Planning Dept		60				60	
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Environmental Planner		8				8	
5-3	Ensure long-term maintenance of structural BMPs.	City Attorney/Planning Dept							Variable, depending on number and type of BMPs
	Pollution Prevention/Good Housekeeping								
6-1	Employee training program.	Department of Public Works							Variable. 8-24 hours of training per employee per permit term
6-2	Continue street and parking lot sweeping.	Department of Public Works	48	48	48	48	48	240	As currently budgeted plus 48 hours/year for record keeping, GIS mapping, and prioritizing CB cleaning
6-3	Storm drain maintenance	Department of Public Works	120	120	120	120	120	600	As currently budgeted plus 120 hours/year for record keeping
6-4	Evaluate street sweeping and catch basin cleaning equipment	Department of Public Works							As currently budgeted.
6-5	Roadway deicing	Department of Public Works	80	80	80	80	80	400	As currently budgeted plus 80 hours/year for record keeping, monitoring industry practices and incorporating changes.
6-6	Proper snow disposal	Department of Public Works	8					8	

A

**Table A-1
Summary of BMPs and Anticipated Additional Costs (Person-Hours) for Stormwater Management Plan Implementation**

BMP ID	BMP	Responsible Department	Estimated Hours Required						Other Costs/Comments
			Year 1	Year 2	Year 3	Year 4	Year 5	Total	
6-7	Continue spill prevention and response training at DPW facility.	DPW/Health Department							Approximantely \$1,500 every 2-3 years.
6-8	Develop written spill prevention and response plan for DWP facility.	DPW/Health Department		80	20	20	20	140	
6-9	Continue to maintain hazardous materials inventory.	DPW/Fire Department/Health Dept							As currently budgeted.
6-10	Minimize impacts from vehicle maintenance	Department of Public Works							As currently budgeted.
6-11	Minimize impacts from vehicle washing.	Department of Public Works/Police Dept			80				
6-12	Park and landscape maintenance.	Park & Forestry/Recreation Department		16	16	16	16	64	As currently budgeted plus 16 hours/year for record keeping
6-13	Continue tree planting and maintenance program.	Park & Forestry/Recreation Department							As currently budgeted.
6-14	Illegal dumping control.	Department of Public Works/Health Dept		24	24	24	24	96	24 hours/year to train employees/maintain records/costs of signs
6-15	Continue to hold Annual Household Hazardous Waste Collection Day.	Health Department							As currently budgeted.
6-16	Continue to provide monthly waste drop off days.	Health Department							As currently budgeted.
6-17	Continue enforcement of pet waste pick-up ordinance. Continue frequent trash barrel emptying to encourage proper disposal.	Health Dept/Animal Control Officer /DPW/ Parks & Rec Depts							As currently budgeted.
6-18	Implement stormwater improvements at Wall Street Highway Yard	DPW/Environmental Planner							Total project cost for all improvements is \$260,000. \$155,000 is funded by DEP's 319 grant. \$105,000 is funded by City.
6-19	Enter into agreement with Historic Preservation Officer to mitigate potential impacts to Blackinton Houses & Park.	Environmental Planner		60					Total project cost for all improvements is \$260,000. \$155,000 is funded by DEP's 319 grant. \$105,000 is funded by City.
TOTAL COSTS			546	846	694	606	606	3,158	



Memorandum

To: File

From: Christopher Hayward and Dwight Dunk

Date: June 17, 2003

*Subject: EPA NPDES Phase II Stormwater Rule – ESA Eligibility per
Criteria A of Addendum A to the Final Rule
City of Attleboro, MA*

Addendum A to the EPA Final NPDES Phase II Stormwater Rule (Final Rule) effective May 1, 2003 requires that activities regulated by the small MS4 (municipal separate storm sewer systems) general permit do not adversely affect federally protected species or their critical habitat. Small MS4 operators need to assess the impacts of their storm water discharges, allowable non-storm water discharges, and discharge related activities on federal protected species and their habitat. And, prior to obtaining general permit coverage, applicants must meet the eligibility provisions of this permit.

Addendum A – Endangered Species Guidance of the Final Rule presents 5 criteria to determine whether or a not an applicant can meet the Endangered Species Act (ESA) requirements. Criterion A confers eligibility by documenting (using published information) the absence of federally protected species or designated critical habitat in or in the proximity of the MS4 community or the regulated portion of the community, or at the discharge points where authorized discharges reach the receiving waters.

In accordance with the guidance presented in Addendum A, CDM environmental scientists reviewed applicable published information regarding the occurrence of federally protected (threatened or endangered) species or their critical habitat in the City of Attleboro or proximate to where the authorized discharge reaches the receiving waters. Lists of federally protected species within the appropriate county available on the EPA web site were utilized and the EPA list was cross-referenced with the municipal list of state and federally protected species available on the Massachusetts Natural Heritage and Endangered Species Program (NHESP) web site. Where necessary, we also reviewed the location of estimated habitats of state protected species as published by the NHESP's Habitat Atlas 2000-2001 edition. Please note, the state list of protected species includes federally protected species. See attached documents utilized to complete this assessment.

EPA NPDES Phase II Stormwater Rule – Attleboro, MA
June 17, 2003
Page 2

Based on our review of the attached documentation, it is our opinion that there are no federally endangered or threatened species, or critical habitat of federally protected species in the MS4 community or regulated portions thereof, or the points where authorized discharges reach the receiving waters. Therefore, the City of Attleboro meets the ESA eligibility requirements of the Final NPDES Phase II Stormwater Rule pursuant to Criteria A as described in Addendum A to the Final Rule.

c: B. McCarthy, CDM



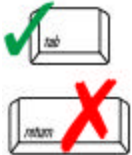
Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Watershed Management
BRP WM 08A NPDES Stormwater General Permit
Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

W040422
 Transmittal Number

Facility ID (if known)

A. Instructions

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Submission of this Notice of Intent constitutes notice that the entity named at item B1. of this form intends to be authorized by the DEP General Permit issued jointly with EPA for stormwater discharges from the small municipal separate storm sewer system (MS4), in the location identified at item B2. of this form. Submission of the Notice of Intent also constitutes notice that the party identified at item B1. has read, understands and meets the eligibility conditions of Part I.B. of the NPDES Small MS4 General Permit, agrees to comply with all applicable terms and conditions of the NPDES Small MS4 General Permit, and understands that continued authorization to discharge is contingent on maintaining eligibility for coverage. **In order to be granted coverage, all information required on BRP WM 08A, including the Stormwater Management Program Summary and Time Frames form, must be completed. Please read the permit and make sure you comply with all requirements, including the requirement to develop and implement a stormwater management program.**

B. Applicant Information

1. Small MS4 Operator/Owner Information:

City of Attleboro
 Name
 77 Park Street
 Mailing Address
 Attleboro MA
 City/Town State
 508-223-2222
 Telephone Number Email (if available)

2. Municipality Name

Attleboro
 City/Town

3. Legal Status:

Federal City/Town State Tribal Private
 Other public entity: _____
 Specify Public Entity

4. Other regulated MS4(s) within municipal boundaries:

Massachusetts Highway Department

5. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for "listed species" and critical habitat been met?

yes pending no



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B. Applicant Information (cont.)

6. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for protection of historic properties been met?
- yes pending no

Note:
 Section C may be duplicated to accommodate a larger list of receiving waters

C. Names of (Presently Known) Receiving Waters

Receiving Water:	No. of Outfalls	Listed as Impaired?	Impairment
Tenmile River Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Metals, nutrients, siltation, organic enrichment/low DO, pathogens, noxious aquatic plants, turbidity Specify
Sevenmile River Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	organic enrichment, low DO, pathogens Specify
Dodgeville Pond Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	nutrient, pathogens, noxious aquatic plants, turbidity Specify
Farmers Pond Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	nutrients, noxious aquatic plants Specify
Hebronville Pond Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	noxious aquatic plants Specify
Mechanics Pond Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	nutrients, pathogens, noxious aquatic plants Specify
Luther Reservoir Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	turbidity Specify
Lake Como Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	noxious aquatic plants, turbidity Specify
Speedway Brook Name	Unknown Number	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	metals, nutrients, siltation, organic enrichment, low DO, pathogens, turbidity Specify
Manchester Pond Name	Unknown Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specify
Orrs Pond Name	Unknown Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specify
Cranberry Ponds Name	Unknown Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specify



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C. Names of (Presently Known) Receiving Waters (Cont.)

<u>Sweeden's Swamp</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Fourmile Brook</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Brook Tributary to Tenmile River</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Brook Tributary to Sevenmile River</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Thatcher Brook</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Bliss Brook</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Streams Tributary to Thatcher Brook</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Chartley Brook</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Chartley Pond</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Coopers Pond</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Bungay River</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Blackstone River</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Happy Hollow Pond</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Robin Hollow Pond</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>
<u>Unnamed ponds and wetlands</u> Name	<u>Unknown</u> Number	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Specify</u>



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D. Stormwater Management Program Summary

1. Public Education:

<u>1-1</u> BMP ID # Article/brochure about stormwater mailed to residents and businesses _____ Specify Best Management Practice	<u>Environmental Planner</u> Responsible Dept./Person Name	<u>Article/brochure distributed annually</u> Specify Measurable Goal
<u>1-2</u> BMP ID # Update City website to include stormwater management information _____ Specify Best Management Practice	<u>Environmental Planner/Conservation Commission</u> Responsible Dept./Person Name	<u>City website updated</u> Specify Measurable Goal
<u>1-3</u> BMP ID # Sponsor Cleanup Days for rivers and water bodies within City limits _____ Specify Best Management Practice	<u>DPW/Health Dept/Park and Forestry Dept</u> Responsible Dept./Person Name	<u>Hold City-sponsored Cleanup Days</u> Specify Measurable Goal
<u>1-4</u> BMP ID # Stormwater education program for school children _____ Specify Best Management Practice	<u>Environmental Planner</u> Responsible Dept./Person Name	<u>Presentation given to middle schools</u> Specify Measurable Goal
<u>1-5</u> BMP ID # Present stormwater management issues to organizations _____ Specify Best Management Practice	<u>Environmental Planner</u> Responsible Dept./Person Name	<u>Presentation given to at least one group annually</u> Specify Measurable Goal _____
<u>1-6</u> BMP ID # Educate dog owners about picking up dog waste _____ Specify Best Management Practice	<u>Health Dept/City Clerk</u> Responsible Dept./Person Name	<u>Pet waste fact sheets mailed to dog owners in annual dog registration mailing</u> Specify Measurable Goal
<u>1-7</u> BMP ID # Install and maintain signs for stormwater management and pet waste clean-up at schools and parks _____ Specify Best Management Practice	<u>Park and Forestry Dept/Recreation Dept</u> Responsible Dept./Person Name	<u>Number of signs installed, number of signs inspected</u> Specify Measurable Goal



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D. Stormwater Management Program Summary (Cont.)

1-8

 BMP ID #
 Staff table at annual Earth Day event

 Specify Best Management Practice

Health Dept

 Responsible Dept./Person Name

Table staffed annually, number of brochures handed out

 Specify Measurable Goal

1-9

 BMP ID #
 Continue to staff a table weekly at "Wednesday Night Market"

 Specify Best Management Practice

Health Dept

 Responsible Dept./Person Name

Table staffed, number of brochures handed out

 Specify Measurable Goal

1-10

 BMP ID #
 Annual update of Stormwater Management Plan at televised Municipal Council meeting

 Specify Best Management Practice

Environmental Planner/DPW

 Responsible Dept./Person Name

Annual update of SWMP at Municipal Council meeting

 Specify Measurable Goal

1-11

 BMP ID #
 Appear on local access television talk show to discuss stormwater management

 Specify Best Management Practice

Planning Dept/Health Dept/DPW

 Responsible Dept./Person Name

Periodic discussion of stormwater management on local access television

 Specify Measurable Goal

1-12

 BMP ID #
 Post information on stormwater management on local access television

 Specify Best Management Practice

Environmental Planner

 Responsible Dept./Person Name

Information posted and updated on local access channel.

 Specify Measurable Goal

1-13

 BMP ID #
 Post signs and develop and distribute brochures on Wall Street Highway Yard Stormwater Improvements

 Specify Best Management Practice

DPW/Environmental Planner

 Responsible Dept./Person Name

Signs posted and brochures distributed

 Specify Measurable Goal

2. Public Participation:

2-1

 BMP ID #
 Comply with state public notification guidelines at MGL Chapter 39 Section 23B

 Specify Best Management Practice

DPW/Environmental Planner/Health Dept

 Responsible Dept./Person Name

Notices posted in designated locations

 Specify Measurable Goal



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D. Stormwater Management Program Summary (Cont.)

<u>2-2</u> BMP ID # Stencil catch basins with don't dump message Specify Best Management Practice	<u>DPW</u> Responsible Dept./Person Name	<u>Number of catch basins stenciled</u> Specify Measurable Goal
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3. Illicit Discharge Detection and Elimination:

<u>3-1</u> BMP ID # Conduct dry weather outfall screening Specify Best Management Practice	<u>DPW</u> Responsible Dept./Person Name	<u>Percent of outfalls screened</u> Specify Measurable Goal
--	---	--

<u>3-2</u> BMP ID # Map stormwater outfalls and receiving waters Specify Best Management Practice	<u>Environmental Planner</u> Responsible Dept./Person Name	<u>Map created</u> Specify Measurable Goal
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<u>3-3</u> BMP ID # Map stormwater collection system in GIS Specify Best Management Practice	<u>Environmental Planner</u> Responsible Dept./Person Name	<u>GIS of stormwater system created</u> Specify Measurable Goal
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<u>3-4</u> BMP ID # Develop and implement plan to identify and remove non- stormwater discharges Specify Best Management Practice	<u>DPW</u> Responsible Dept./Person Name	<u>Number of illicit connections found and removed</u> Specify Measurable Goal
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<u>3-5</u> BMP ID # Develop ordinance that prohibits illicit connections, allows access to buildings, and requires redirection of illicit connections found Specify Best Management Practice	<u>City Attorney/Planning Dept/DPW</u> Responsible Dept./Person Name	<u>Draft ordinance developed and presented to Municipal Council</u> Specify Measurable Goal
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<u>3-6</u> BMP ID # Continue inspection of new construction for correct connection to sanitary sewer Specify Best Management Practice	<u>DPW/Dept of Water and Wastewater</u> Responsible Dept./Person Name	<u>New construction inspected</u> Specify Measurable Goal
--	---	--



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D. Stormwater Management Program Summary (Cont.)

4. Construction Site Runoff Control:

<p><u>4-1</u> BMP ID # Develop city-wide construction site erosion and sediment control ordinance for sites greater than 1 acre Specify Best Management Practice</p>	<p><u>City Attorney/Planning Dept</u> Responsible Dept./Person Name</p>	<p><u>Draft ordinance developed and presented to Municipal Council</u> Specify Measurable Goal</p>
<p><u>4-2</u> BMP ID # Require construction site operator to submit monthly erosion and sediment control reports. Specify Best Management Practice</p>	<p><u>DPW</u> Responsible Dept./Person Name</p>	<p><u>Inspection reports submitted to City</u> Specify Measurable Goal</p>
<p><u>4-3</u> BMP ID # Review site plans for stormwater impacts Specify Best Management Practice</p>	<p><u>Environmental Planner/Planning Board</u> Responsible Dept./Person Name</p>	<p><u>Number of site plans reviewed</u> Specify Measurable Goal</p>
<p><u>4-4</u> BMP ID # Consideration of public input Specify Best Management Practice</p>	<p><u>Environmental Planner/Planning Board</u> Responsible Dept./Person Name</p>	<p><u>Public review and comment periods held; signs posted at construction sites</u> Specify Measurable Goal</p>

5. Post Construction Runoff Control:

<p><u>5-1</u> BMP ID # Develop ordinance to apply Performance Standards 2,3,4,7,and 9 of the MA Stormwater Policy to developments disturbing more than 1 acre. Specify Best Management Practice</p>	<p><u>City Attorney/Planning Dept</u> Responsible Dept./Person Name</p>	<p><u>Draft ordinance developed and presented to Municipal Council</u> Specify Measurable Goal</p>
<p><u>5-2</u> BMP ID # Specify a stormwater BMP manual to be used for consistent design and performance standards. Specify Best Management Practice</p>	<p><u>Environmental Planner</u> Responsible Dept./Person Name</p>	<p><u>BMP manual selected.</u> Specify Measurable Goal</p>



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D. Stormwater Management Program Summary (Cont.)

<p><u>5-3</u> BMP ID # <u>Ensure long-term maintenance of structural BMPs.</u> Specify Best Management Practice</p>	<p><u>City Attorney/Planning Dept</u> Responsible Dept./Person Name</p>	<p><u>Draft ordinance developed and presented to Municipal Council</u> Specify Measurable Goal</p>
<p>6. Municipal Good Housekeeping:</p>		
<p><u>6-1</u> BMP ID # <u>Employee Training Program</u> Specify Best Management Practice</p>	<p><u>DPW</u> Responsible Dept./Person Name</p>	<p><u>Number/percent of DPW employees who receive stormwater training each year.</u> Specify Measurable Goal</p>
<p><u>6-2</u> BMP ID # <u>Continue street and parking lot sweeping</u> Specify Best Management Practice</p>	<p><u>DPW</u> Responsible Dept./Person Name</p>	<p><u>All streets and municipal parking lots swept in spring; downtown street swept twice weekly throughout year, weather permitting; tons of materials removed from roadways annually.</u> Specify Measurable Goal</p>
<p><u>6-3</u> BMP ID # <u>Storm drain maintenance</u> Specify Best Management Practice</p>	<p><u>DPW</u> Responsible Dept./Person Name</p>	<p><u>Percent of catch basins cleaned annually.</u> Specify Measurable Goal</p>
<p><u>6-4</u> BMP ID # <u>Evaluate street sweeping and catch basin cleaning equipment.</u> Specify Best Management Practice</p>	<p><u>DPW</u> Responsible Dept./Person Name</p>	<p><u>Evaluation of existing equipment</u> Specify Measurable Goal</p>
<p><u>6-5</u> BMP ID # <u>Roadway deicing</u> Specify Best Management Practice</p>	<p><u>DPW</u> Responsible Dept./Person Name</p>	<p><u>Reduction in amount of deicers used (compared to years with similar snowfall and deicer demand) and environmental impacts of deicers.</u> Specify Measurable Goal</p>



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D. Stormwater Management Program Summary (Cont.)

6-6
BMP ID #

Proper snow disposal
Specify Best Management Practice

DPW
Responsible Dept./Person Name

Designated snow disposal
areas identified.
Specify Measurable Goal

6-7
BMP ID #

Continue spill prevention and
response training at DPW
facility
Specify Best Management Practice

DPW/Health Dept
Responsible Dept./Person Name

Periodic training of employees.
Specify Measurable Goal

6-8
BMP ID #

Develop a written spill
prevention and response plan
for the DPW facility
Specify Best Management Practice

DPW/Health Dept
Responsible Dept./Person Name

Written spill prevention and
response plan developed and
updated annually.
Specify Measurable Goal

6-9
BMP ID #

Continue to maintain
hazardous materials inventory
for materials used or
generated by the City.
Specify Best Management Practice

DPW/Fire Dept/Health Dept
Responsible Dept./Person Name

Maintenance of hazardous
materials inventory system.
Specify Measurable Goal

6-10
BMP ID #

Minimize impacts from vehicle
maintenance.
Specify Best Management Practice

DPW
Responsible Dept./Person Name

Reduction in amount of
hazardous materials used.
Specify Measurable Goal

6-11
BMP ID #

Minimize impacts from vehicle
washing.
Specify Best Management Practice

DPW/Police Dept
Responsible Dept./Person Name

Investigation with specific
recommendations completed.
Resulting implementation of
recommendations scheduled.
Decline in use of soap. Switch
to biodegradable soap.
Specify Measurable Goal

6-12
BMP ID #

Park and landscape
maintenance.
Specify Best Management Practice

Park & Forestry
Dept/Recreation Dept
Responsible Dept./Person Name

Amount of herbicides/fertilizers
used.
Specify Measurable Goal



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D. Stormwater Management Program Summary (Cont.)

6-13
 BMP ID #
 Continue tree planting and maintenance program.
 Specify Best Management Practice

Park & Forestry
Dept/Recreation Dept
 Responsible Dept./Person Name

Number of trees planted.
 Specify Measurable Goal

6-14
 BMP ID #
 Illegal dumping control.
 Specify Best Management Practice

DPW/Health Dept
 Responsible Dept./Person Name

Number of signs posted; number of sites cleaned up.
 Specify Measurable Goal

6-15
 BMP ID #
 Continue to hold Annual Household Hazardous Waste Collection Day.
 Specify Best Management Practice

Health Dept
 Responsible Dept./Person Name

Household Hazardous Waste Collection Day held annually.
 Specify Measurable Goal

6-16
 BMP ID #
 Continue to provide monthly drop off days for automotive and other waste products.
 Specify Best Management Practice

Health Dept
 Responsible Dept./Person Name

Monthly waste drop offs for residents provided during non-winter months.
 Specify Measurable Goal

6-17
 BMP ID #
 Continue enforcement of pet waste pick-up ordinance. Empty trash barrels frequently to encourage proper disposal.
 Specify Best Management Practice

Health Dept/Animal Control Officer/DPW/Parks and Recreation Depts
 Responsible Dept./Person Name

Reduction in complaints, if any, of pet waste in public areas; frequency of trash barrel emptying.
 Specify Measurable Goal

6-18
 BMP ID #
 Implement stormwater improvements at the City's Wall Street Highway Yard designed to reduce nonpoint source pollution to the Tenmile River.
 Specify Best Management Practice

DPW/Environmental Planner
 Responsible Dept./Person Name

Construction of stormwater improvement projects.
 Specify Measurable Goal

6-19
 BMP ID #
 Enter into agreement with Historic Preservation Officer to mitigate potential impacts to Blackinton Houses & Park Historic Site.
 Specify Best Management Practice

Environmental Planner
 Responsible Dept./Person Name

Written agreement with Historic Preservation Officer obtained.
 Specify Measurable Goal



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7. BMPs for Meeting TMDL: NONE REQUIRED; NO TMDLs IN ATTLEBORO.

E. 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, I certify that 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.

Printed Name

Signature

Date



Hand-enter Your Transmittal Number →

W 040422

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://www.state.ma.us/scripts/dep/trasmfrm.stm> or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to:
DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application.
Copy 2 must accompany your fee payment.
Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to DEP, P.O. Box 4062, Boston, MA 02211

For DEP Use Only
Permit No. _____
Rec'd Date _____
Reviewer _____

A. Permit Information

BRPWM08A Stormwater
Permit Code: 7 or 8 character code from permit instructions Name of Permit Category
NPDES Stormwater General Permit
Type of Project or Activity

B. Applicant Information – Firm or Individual

City of Attleboro
Name of Firm - Or, if party needing this approval is an individual enter name below:
Last Name of Individual First Name of Individual MI
77 Park Street
Street Address
Attleboro MA 02703 508-223-2222
City/Town State Zip Code Telephone # and extension
Mr. Edward Tanner
Contact Person e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

City of Attleboro Storm Drainage System
Name of Facility, Site or Individual DEP Facility Number (if Known) Federal I.D. Number (if Known)
same as above
Street Address e-mail address (optional)
City/Town State Zip Code Telephone # and extension

D. Application Prepared by (if different from Section B)

Camp Dresser & McKee Inc.
Name of Firm Or Individual
50 Hampshire Street
Address
Cambridge MA 02139 617452-6000
City/Town State Zip Code Telephone # and extension
Brent McCarthy
Contact Person LSP Number (21E only)

E. Permit - Project Coordination

Is this project subject to MEPA review? yes no If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit: EOE file number _____
Is an Environmental Impact Report Required? yes no
Is this application part of a larger project for which two or more DEP permits are being or will be sought? yes no

List any other DEP permits that apply to this project:

Permit Category	Date of Submission (tentative or actual)	Transmittal # if application already submitted

F. Amount Due

Special Provisions:

- Fee Exempt* (city, town or municipal housing authority)(state agency if fee is \$100 or less)
- Hardship Request - payment extensions according to 310 CMR 4.04(3)(c)
- Alternative Schedule Project (according to 310 CMR 4.05 and 4.10)

*There are no fee exemptions for 21E, regardless of applicant status

Check Number _____ Dollar Amount _____ Date _____

Please make check payable to the Commonwealth of Massachusetts and mail check and one copy of this form to:
DEP, P.O. Box 4062, Boston, MA 02211

