



Section Five

Section 5

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

Control Measure 5, Post-construction Stormwater Management for New Development and Redevelopment, is designed to protect stormwater quality from new development and redevelopment disturbing more than one acre of land or more. Certain activities are required by the regulations, and several activities currently underway in the City will meet the intent of the rule.

To address Control Measure 5, Haverhill's Stormwater Management Plan includes development of an ordinance to require runoff controls and selection of a BMP manual for use by developers. Use of specific BMPs will allow the City to better control stormwater runoff from new development and redevelopment projects.

BMP #5-1: Develop Ordinance to Require Runoff Controls for New and Re-Development

Description: Regulations from the Planning Board, Conservation Commission, and Watershed Council will be reviewed to determine the extent of required controls and to determine if these controls are adequate to meet the Phase II requirements. If necessary, new rules will be added or existing rules amended. The added or amended ordinances will include requirements for long-term operation and maintenance of installed BMPs.

The Massachusetts Stormwater Management Policy can serve as a good guideline for managing post-construction stormwater. The draft Phase II permit recommends that Standards 2, 3, 4, 7, and 9 of the policy be used to help fulfill the requirements of Control Measure 5¹. The permit requires those five standards be applied in areas within the jurisdiction of the Wetlands Protection Act. Extending this requirement to the rest of Haverhill is one potential way the City may meet this BMP.

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.

Measurable Goal: Review of existing ordinances. Draft ordinance additions or changes as necessary. Present additions or changes to City Council for consideration.

Schedule: Review existing ordinances in fall 2003. Draft new ordinances or changes as necessary in late 2003. Present to City Council in spring 2004, and each spring thereafter until passed.

Responsible person: Conservation Commission, Engineering Department, Water & Wastewater Department, Stormwater Coordinator.

Cost: Staff time to review existing ordinances and modify as needed. Time to prepare and present ordinance to City Council.

BMP #5-2: Recommend a BMP Manual for Use by Planners and Developers

Description: The City will select a BMP manual which recommends appropriate stormwater controls to be used by planners and developers for all projects greater than 1 acre. Examples of appropriate manuals include the US EPA's Menu of BMPs (www.epa.gov/npdes/menuofbmps) and MA DEP's Stormwater Technical Handbook.

Measurable Goal: BMP manual selected.

Schedule: Complete by end of 2003.

Responsible person: Engineering Department, Planning Department, Conservation Commission, Stormwater Coordinator.

Cost: Minimal staff time to review available manuals and select one for recommendation. Staff time to obtain concurrence for other City departments.