TOWN OF SUDBURY
Office of the Town Manager

Maureen G. Valente
Town Manager

288 Old Sudbury Road
Sudbury, Massachusetts 01776-1843
Tel: (978) 443-8891, x385
Fax: (978) 443-0756
E-mail: valentem@town.sudbury.ma.us

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April 28, 2005

Mr. Glenn Haas
Division of Watershed Management
Commonwealth of Massachusetts Bureau of Resource Protection
One Winter Street
Boston, MA 02108

United States Environmental Protection Agency Region 1
Office of Ecosystem Protection
One Congress St., Suite 1100
Boston, MA 02114-2023

Re: NPDES DEP & EPA Permit #MAR041224

Dear DEP and EPA:

In accordance with our NPDES permit, please accept this document as our second annual report required under our MS4 Phase II Storm water Permit. The Town of Sudbury continues our comprehensive efforts to protect our water quality through appropriate use of storm water best management practices, controlling erosion, and public education.

Assessment of Compliance with Permit

Sudbury continues to pursue the goals as described in our Permit. Both the Year I and Year II measurable goals have been met with the exception of the Year II goals of completing our town-wide catch basin sampling program. This program will be completed during the summer of 2005, weather dependent.

The ground work of collecting the information on our storm water system, mapping this data, and establishing a process to keep these records updated is now in place and functioning as intended.

Appropriateness of Selected BMP's

The Town of Sudbury has extensive information available for soils types, depth to groundwater, and current storm water structures. To date, we have had no need to alter any of the selected BMP's. WE continue to assume some modification may be necessary in areas with minimum infiltration capabilities, particularly in the Route 20 Business and Commercial District.

PROGRESS TOWARD ACHIEVING MEASURABLE GOALS

Year II Measurable Goals:

Sudbury again contracted for Year II with the SuAsCo Watershed Community Council to provide both the Public Education and Outreach and the Public Involvement and Participation components of the Year II permit requirements. Please see the attached documents for the specifics of these requirements. Below are listed several activities and programs that are in addition to the SuAsCo materials.

Public Education and Outreach:

- Six complete Grade 5 teaching kits were distributed to each of the Grade 5 classroom teachers in Sudbury. These kits supplied all the materials and instructions for introducing students to the issues of rainfall, storm water runoff, and water quality.
- The Conservation Commission offered to assist the classroom teachers with the discussions, and, if desired, any field trips that may be planned. This program continues in 2005 with the current fifth grades. As part of this year's program, we anticipate the poster contest will be held with a public display of all entries. In addition, the Selectmen will be holding the drawing for the storm water umbrellas at an upcoming Town Forum.

Public Participation and Involvement:

- The Selectmen approved the establishment of a Ponds & Waterways Committee in early 2005. The SCC will meet periodically with the PWWC to discuss implementation of mutual goals.
- Public Education and Outreach continues with the assistance of the Earth Decade Committee, the Hop Brook Ponds Association, and a Hop Brook Stream Team. Through these organizations, residents can learn and participate in the protection of water quality in town.

Illicit Discharge Detection and Elimination:

- The Sudbury Department of Public Works conducted and in-depth survey of all catch basins during the annual cleaning to determine if any illicit tie-ins were observed. A total of twenty-four unpermitted tie-ins directly to the Town storm water system were found. The source of the water is currently being determined and to date it appears that many of the illicit discharges are from foundation drains installed to lower groundwater to prevent or alleviate basement flooding. These tie-ins do not present a direct water quality problem, however, many of

the Town's drainage pipes and culverts were not designed to handle the increase in flow. During 2005 we will be looking at the drainage systems' design and capacity, particularly in areas where multiple tie-ins discharging at the same outfall were discovered. We will also be looking at the increase in peak rates of flow at the outfalls that could present a souring and downstream sedimentation problem.
One tie-in was found to be from an interceptor drain installed to lower the ground water around a septic system leaching field.

- The townwide sampling program is scheduled to begin in May 2005, pending funding. There appears to be some funding within the Board of Health budget, however the use of these funds is subject to review and prioritizing.

Construction Site and Post-Construction Runoff Control:

- The Town's practice of requiring pre-application meetings has been expanded to include all projects that disturb greater than one acre; are a new subdivision; are a commercial or business project requiring Selectmen Site Plan Review; or trigger new or revised storm water design or structures.
- Sudbury is now requiring the SWPPP (Storm water Pollution Prevention Plan) to be submitted to the Town for review and approval prior to the start of construction.
- All new Storm water Operation and Maintenance Plans are now entered into a computer data-base for ease of tracking and more systematic follow-up. We will be working on entering, and upgrading (where applicable), older O & M Plans.
- The DPW is in the process of instituting a more efficient process for reporting storm water structure maintenance needs. This process will have the ability to prioritize the work through a ranking method based on existing,degree of threat to water quality as well as public safety.
- A Storm Water Management Maintenance Fund has been set up by the Planning Board. It is funded from fees paid for new residential subdivisions to offset the increased street maintenance burden on the DPW. This fund was used to purchase a new piece of equipment for cleaning and vacuuming catch basins and will continue to be used for roadway repairs, including storm water upgrades.
- The Conservation Commission is considering revising the local Wetlands Bylaws to permit charging fees for site inspections, especially for follow-up inspections when erosion control deficiencies are found.

Pollution Prevention/Good Housekeeping:

- The Storm Water Compliance Committee has met to discuss and recommend changes to Town bylaws and regulations. At the 2005 Annual Town Meeting a Planning Board Article, jointly sponsored by the Planning Board and the Conservation Commission was submitted that revised the existing Water Resource Protection District Special Permit regulations. The revisions provided incentives for business, commercial, and industrial property owners to upgrade their drainage systems in exchange for approval to exceed the minimum 15% impervious surface maximum limit. All the affected properties pre-dated the maximum Impervious limit imposition and pre-dated the requirements for treatment of storm water. The Town found an opportunity to help economic development while significantly upgrading the quality of water within the districts. Whereas the affected districts are located mostly within Zone II of the primary municipal groundwater wells, this was an opportunity for a win-win. It passed unanimously at Town Meeting.
- Municipal buildings were reviewed to determine the need for upgrades to storm water systems. Fortunately, most municipal buildings are new enough to have been subjected to current storm water guidelines including O & M Plans. The Town Hall, Noyes Elementary School, the Flynn Office Building, and the Police Station are the only buildings known to not meet current storm water guidelines. The Town Hall, Flynn Building, and Noyes Elementary School all discharge into a man-made detention pond in Heritage Park. This pond was recently partially dredged to provide a forebay and vegetative remediation at the pond inlet to provide a particulate settling basin and uptake of roadway pollutants. Further remediation measures will be reviewed in the coming year.
- The Noyes School septic system was flagged as a pollutant generator due to the design and location of the septic system leach field in the water table and in close proximity to a pond. As a result, the pond and groundwater is degraded in this area. The SCC will be meeting with the School Committee to discuss upgrades.
- A number of emergency repairs to roadways and drainage systems were necessary during Year II. Greater than normal summer rain, heavy snow, and increased beaver activity all contributed to degradation of some storm water structures, catch basins, and roadway berms that channel the runoff to the catch basins. These areas were flagged for emergency repairs and proceeded under a Generic Order of Conditions from the Conservation Commission. The most severe of these emergency repairs was the complete

reconstruction of a culvert under Water Row at the Sudbury River. The collapse of an old culvert completely washed out the roadway and made it impassable for several weeks. Repairs included the construction of headwalls at both the inlet and outlet, rip-rap slopes, sediment basins, and roadway crowning to direct flow to rip-rap areas. This area was determined to be unsuitable for the installation of catch basins with sumps and gas traps due to the extremely high water table. The new structure was added to the data base and flagged for review following major storm events in addition to the regular review and maintenance schedule actions.

Activities for Next Reporting Cycle:

- Recordkeeping, particularly for tracking the permitted vs. the unpermitted drainage tie-ins, will be revised to provide a more regular, systematic approach for reporting. A separate data base is being developed as a central clearing house for all drainage tie-ins. For permitted tie-ins, a Street Opening Permit is required. These permitted tie-ins will be entered into the database. The DPW basin inspector will be given a short check-off form to fill out for each catch basin. The information on these forms pertaining to observed tie-ins will be added to the data base to facilitate tracking compliance.
- All scheduled and unscheduled cross-culvert repairs will be reviewed to determine if full or partial compliance with the new EPA/DEP regulations regarding the use of bridges rather than culverts for new wetland crossings can be applied. Due to the cost of upgrading a wetland crossing from a culvert with fill to a bridge or large box culvert, areas where the upgrades will have the most positive impact will be prioritized.
- The Rail Trail Conversion Committee will be working with the Town Manager, State EOT, and Department Heads to identify environmental issues along the proposed Bruce Freeman Memorial Rail Trail. These issues will include the type of trail surface and the extent of runoff mitigation required. It is the intent of the Town to comply with the requirements of our DEP/EPA for all municipal projects, including trails.
- Sudbury water quality has been seriously impacted in two major incidents resulting from lack of erosion and sedimentation control across the town border. Discussion with the applicable Boards in the abutting town has begun and we will continue to work to achieve compliance in projects over which we lack initial control but can become involved after-the fact.
- Sudbury will pursue funding for one, ideally for two, Hazardous Waste Days in the coming twelve months.

We once again appreciate this opportunity to provide a status report on Sudbury's progress toward our Storm water Management Goals.

Sincerely,

Maureen G. Valente

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Town Manager

Cc: Nancy Bryant, SuAsCo