

# *2016 Annual Report*

## **Stormwater Management Program City of Derby, Connecticut**



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## **Summary of requirements:**

In 2006, the City of Derby had a five-year Phase II stormwater Management Plan designed as required by the Connecticut department of environmental Protection. The General permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems is comprised of six components to reach compliance to the departments standards. These are as follows:

- 1) Public education and outreach
- 2) Public involvement and participation
- 3) Illicit discharge detection and elimination
- 4) Construction of site stormwater runoff control
- 5) Post-construction stormwater management
- 6) Pollution prevention and well maintained operations

Along with the six components listed above, the City is required to perform tests on water samples taken from six different drainage outfall locations throughout the City. The selected locations must represent areas of industrial, commercial, and residential development required by the General Permit. The Analytical Consulting Technology, Inc of Waterbury performed testing in compliance with the general permit. The samples laboratory test results are included in appendix of the report.

The City is required by the General Permit to submit annual reports, which exhibit the progress in each of the six categories and outline future goals and objectives. Included is the 2016 calendar year report of the City's activities under the General Permit.

## 2016 Compliance

Throughout the 2016 year the city of Derby continued to work toward completing each of the six requirements stated in the Stormwater Management Plan. The goals that were reached in each category of the plan are discussed below. This program has been re-issued.

- 1. Public education and outreach:** Information was published in the Household Hazardous Waste Program (HHW) flier and the Long Island Sound Study flier called "Step by Step": A Citizen's Guide to Curbing Polluted Runoff', which was made accessible to the public at the public library as well as the City Hall. Development of educational fliers and literature for public viewing continues.
- 2. Public involvement and participation:** To bring awareness and to promote involvement the stormwater management team met several times throughout the year to review the status of the regulations and ways to achieve goals for the year. The team consisted of the Head of Derby Public Works Department, and other members are, City of Derby Engineer, and the Director of the Library.
- 3. Illicit discharge detection and elimination:** The city of Derby had retained Milone & MacBroom to compile a composite map of all Stormwater outfalls from the City's properties in 2006. This included only the 12inch diameter or greater outfalls. From 2005 to 2016 no outfalls were placed or removed.
- 4. Construction site stormwater runoff control:** In compliance with the *Connecticut Guidelines for Soil erosion and Sediment Control (CTDEP 2002)* the City's land use commission requires all new construction to meet these regulations upon review of the plans and site inspections. This has brought awareness to the contractors and developers of the effects stormwater can have from the sites and the importance of installing adequate stormwater controls. As well as drainage calculations and the installation of stormwater retention systems when needed.
- 5. Post-construction stormwater management in new developments and redevelopments:** For new developments the land use requirements state that a zero increase in net runoff be attained. To store additional volumes of runoff stormwater basins and structures are needed along with water quality structures such as below grade chambers, deeper catch basins sumps to reduce the sediments and debris that could potentially be harmful if they were not detained. To insure this is being followed, during Inland wetlands commission and Planning and Zoning commission

reviews for all subdivisions and other proposed developments it is assured that best managements practices are utilized.

6. **Pollution prevention/good housekeeping for municipal operations:** The City currently subcontracts street sweeping services to remove sediment buildup and large debris from curb gutters, performed annually. They collected an estimated 1500 cubic yards of debris during 2016. Also to reduce the amount of debris on the roadways the City has switched from the use of sand to a salt as per the department environmental protections recommendations that salt causes less contamination than sand, which keeps the roadways clear from snow and ice. Zoning Regulations establishes conditions relating to soil erosion and sediment controls. Also referrals to other agencies for site development such as Inland Wetlands. Enforce requirements for construction site operators to control wastes such as building materials, concrete truck washout, chemicals, litter and sanitary wastes.
7. **Stormwater monitoring:** Laboratory tests are performed on samples from six different locations in the City as per the General Permit. The tests check the samples for contaminants from a specific parameter provided by the General Permit and these are:
  - 1) pH (SU)
  - 2) Hardness (mg/l)
  - 3) Conductivity (Umos)
  - 4) Oil and grease (mg/l)
  - 5) Chemical oxygen demand (mg/l)
  - 6) Turbidity (NTU)
  - 7) Total suspended Solids (mg/l)
  - 8) Total phosphorus (mg/l)
  - 9) Ammonia (mg/l)
  - 10) Total Kjeldahl Nitrogen (mg/l)
  - 11) Nitrate plus Nitrite Nitrogen (mg/l)
  - 12) E. coli (col/100ml)

## Intended implementation for 2017

The City of Derby has the following tasks planned for 2017.

- 1) **Public education and outreach:** Copies of the 2016 annual report will be located at the public library for the public viewing.
- 2) **Public involvement/participation:** The City will review the written participation plan. Semi-annual Stormwater Team meetings will be held. Tentative dates for these meetings are May and September 2017. Additional stormwater members will try to be added. The City will participate in a household hazardous waste collection day program.
- 3) **Illicit discharge detection and elimination:** The drainage outfall map will be edited to include any new discharges that have been installed and/or discovered. The annual stormwater monitoring results will be evaluated to decide if further action is required. The City has not had any illicit discharge, detection or elimination programs in the past, but if necessary will have inspections of drainage systems if evidence of any illicit discharge is discovered during 2017.
- 4) **Construction site stormwater runoff control:** The City will continue to review its land use regulations to keep current with the requirements of the Stormwater Management Plan and the *Connecticut Guidelines for Soil Erosion and Sediment Control*. The City will also continue to evaluate the Current Connecticut Stormwater Quality Manual to see if the city will include additional portions of it in the land use regulations.
- 5) **Post-construction stormwater management in new development and redevelopment:** When the City and/or land use commission review plans for new or redevelopment they will monitor the contractors and developers compliance to make sure they remain consistent with requirements of the Stormwater Management Plan.
- 6) **Pollution prevention/good housekeeping for municipal operations:** All new City employee training will include stormwater items. Public streets will continue to be swept twice a year, and catch basins will be cleaned as required. In areas of development catch basins and street sweeping will be done more frequently to keep the roads clear of any possible debris.
- 7) **Stormwater Monitoring:** Six samples will be taken from outfall areas as required in 2017.