Town of Granby, Connecticut

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

2016 Annual Report

Permit No. GSM000029
General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

Stormwater Management Plan

2016 Annual Report

Town of Granby, Connecticut

Permit Number GSM000029

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A pdf of the 2004 Town of Granby MS4 General Stormwater Permit Stormwater Management Plan and a pdf of the MS4 General Stormwater Permit 2015 Annual Report were made available for public review and comment in early August 2016 on the Town of Granby website to meet Local and State FOI requirements. Both of the documents are located under the town website Main Page, Town Departments tab and Public Works tab.

It is anticipated that the MS4 General Stormwater Permit 2016 Annual Report will be made available for public review and comment before December 1, 2016 to meet FOI requirements.

It is also anticipated that the Town of Granby MS4 General Stormwater Permit Stormwater Management Plan for the modified MS4 General Stormwater Permit, Effective July 1, 2017 will be made available for public review and comment before April 1, 2017 to meet FOI requirements.

2016 Minimum Control Measure Summary

The Town of Granby continues to have several Qualifying Local Programs in most of the six Minimum Control Measures.

Minimum Control Measure No. 1 - Public Education and Outreach

The following stormwater and water quality education and outreach activities were conducted in the Town of Granby:


A heavy weight glossy paper flyer entitled Illustrated Guide to Residential Single Stream Recycling was made available to town residents at the DPW Facility and Town Hall.
A bright yellow flyer entitled *Free Electronics Recycling* with a list of accepted items which are accepted every Saturday between 8 A.M. and 4 P.M. at the Transfer Station on Old Stagecoach Road was made available to town residents at the DPW Facility and Town Hall.

A link to the Connecticut Recycle with PaintCare Program was available to the public on the Public Works tab of Town Departments tab on Main Page of the town website.

**Minimum Control Measure No. 2 - Public Participation/Involvement**

The land use regulations may require a Public Hearing to be held if the Commissions decide the project warrants it or if the public interest requires it.

Town residents continued to be involved in the Household Hazardous Waste, Recycling, Bulky Waste Program and the Free Electronics Recycling programs.

**Minimum Control Measure No. 3 - Illicit Discharge Detection and Elimination**

Nathan L. Jacobson & Associates, Inc. provided Kirk Severance, Director of Public Works with Microsoft Word files of the Town of Durham IDDE Ordinance and Town of Durham Citation Hearing Procedure by e-mail on September 7th with the recommendation that a similar document be prepared for the Town of Granby. An Illicit Discharge and Connections Ordinance was prepared using the above examples and the Model Illicit Discharge and Connection Stormwater Ordinance from the Connecticut Stormwater Quality Manual, Appendix C. The document was reviewed by the Town Attorney and Town Engineer and modifications were recommended. The final draft of the ordinance was submitted to the Board of Selectmen for consideration and was approved by the BOS on December 21, 2016 following a public hearing on the matter.

Town wide MS4 stormwater outfall mapping was conducted from May 25, 2005 through November 10, 2009 with the majority of the mapping being conducted between October 25, 2005 and March 22, 2006. The total number of outfalls is approximately 210 including flared end sections, headwalls and catch basins located on cross culverts. The process of MS4 stormwater outfall mapping town wide was completed utilizing a map grade Global Positioning System (GPS) Unit to locate all MS4 stormwater outfalls 12” in diameter or greater town wide.

The GPS mapping also included all town owned catch basins, dry wells and storm manholes. Based on the GPS mapping there are approximately 1,338 catch basins, 65 dry wells and 11 storm manholes.

It is anticipated that the MS4 stormwater outfall data will be imported to ARCGIS. A layer with all outfall attributes will be created for interfacing with the Town GIS Database as part of the modified MS4 Stormwater General Permit compliance process effective July 01, 2017.

Information on the Household Hazardous Waste and the Electronics Collection Program was available on the Town website.

**Minimum Control Measure No. 4 - Construction Site Runoff Control**
Section 8.7 - Sedimentation and Erosion Control of the Zoning Regulations requires that any project which calls for a cumulative disturbance of over 1/2 acres will require the preparation and submission of a Sediment and Erosion Control Plan. The Plan also requires posting of a cash bond of the greater of $1,000, or 10 percent of the costs of the building permit, and inspections by the town designated agent during construction.

Section 6.1 - Soil Erosion and Sediment Control Plan of the Town of Granby Subdivision Regulations requires that any subdivision will require the preparation and submission of a Sediment and Erosion Control Plan. The Plan also requires posting of a cash bond and inspections by the town designated agent during construction.

Moving forward Kevin Clark, P.E., L.S., Town Engineer, will make the recommendation to the land use commissions that proof of registration for the CTDEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities be made a Condition of Approval, if the commissions are so inclined, when the total land disturbance is five or more acres of land regardless of project phasing and the project must be permitted by the town.

Continued to review construction Site Development Plans and construction Soil Erosion and Sediment Control Plans.

Continued to conduct construction site inspections to ensure implementation of appropriate erosion and sediment control best management practices as contained in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and/or as experience dictates.

**Minimum Control Measure No. 5 - Post-Construction Site Runoff Control**

Continued to maintain the regulatory mechanism to require mitigation measures when the proposed development is likely to cause an increase in the volume or rate of storm water runoff so as to overload the existing drainage system, cause downstream flooding or downstream damage by flooding.

Continued to encourage developers and engineers to incorporate Low Impact Development (LID) measures and Green Infrastructure (GI) measures as contained in the 2004 Connecticut Stormwater Quality Manual, and emerging newer measures into site design.

Kevin Clark, P.E., L.S., Town Engineer continued to review Post-Construction stormwater runoff management plans for all proposed developments and site plans for larger projects.

**Minimum Control Measure No. 6 - Pollution Prevention/Good Housekeeping**

Kirk Severance, Director of Public Works attended the Council of Small Towns (COST) Municipal Stormwater Management Conference on October 19, 2016.

The following individuals have obtained program certification from the CT Technology Transfer
Center Training Programs:

Transportation Leadership Program Graduates:
Kirk Severance 2015

Public Works Academy Program Graduates:
Robert Bahre 2015
Christian Lesiak 2015
Richard Maffiolini 2014
Thomas Matyseck 2014
Stuart Young 2012
Frederick Morton 2010

The Public Works Academy Program includes a Safe Operation of a Snow Plow and Winter Operations and Sander Calibration session.

Road Scholar Program Graduates:
David Shinder 2010
Kirk Severance 2009

Road Master Program Graduates:
David Shinder 2009
Kirk Severance 2008

The Road Master Program includes Principles of Drainage for Local Roads and Planning and Managing Local Road Snow and Ice Activities Workshops.

It is anticipated that Granby DPW employees may pursue CT Technology Transfer Center training programs in calendar year 2017.

Annual road sweeping of 60 miles of town roads were subcontracted to Wethersfield Sweeping Service. Road sweeping began in April and was completed in June.

Approximately 400 dry wells, storm manholes, sedimentation structures and hydrodynamic separators were vectored in 2016. The vectoring was subcontracted to Wethersfield Sweeping Service. The vectoring operations were conducted from June to August. Spot checking of depth of sediment in drainage structures is done after the drainage structure vectoring is complete to ensure complete removal of accumulated sediment and debris.

In winter 2015-2016 the Town of Granby used a premixed road deicing mixture consisting of four parts ClearLane® enhanced deicer (liquid magnesium chloride) mixture to one part sand.

The road deicing mixture is typically applied approximately one hour before snowfall begins which serves to initially prevent the bond between snow/ice and pavement. An application of the
road deicing mixture is applied at a lower application rate immediately following the storm. Utilization of the ClearLane® enhanced deicer treated salt has allowed the town to reduce the deicing mixture application rate per lane mile which has subsequently resulted in a reduction of sedimentation in the drainage structures.

The road deicing mixture is spread with eight full-size snow plow/spreaders (1 ten-wheeler and seven 6-wheelers) and one small snow plow/spreader (3 cubic yards). The majority of the snow plow/spreaders are equipped with computer controlled Epoke Sirius Combination Bulk Spreaders with a ground speed related delivery of deicing material to the spreader disc. A blast controller, which temporarily increases the road deicer application rate, is used at all intersections and hills.

The automated road deicing mixture application allows the road deicing mixture to be uniformly applied at a minimum rate of 400 pounds per lane mile. The road deicing mixture application rate is storm dependent.

**Stormwater Sampling**

One round of MS4 stormwater sampling was conducted on September 27, 2016 to fulfill the MS4 2016 calendar year MS4 stormwater sampling requirements.

The round of six MS4 stormwater outfall samples was obtained from two commercially zone outfalls, two industrial zone outfalls and two residential zone MS4 stormwater outfalls. The samples were obtained from the following locations:

- **C1** - Commercial Zone
  Catch Basin at the east end of Bank Street on the east side of the road
  Drainage Basin No. 4320 - Salmon Brook

- **C2** - Commercial Zone
  Catch Basin at the east end of Mill Pond Drive
  Drainage Basin No. 4300 - Farmington River

- **I1** - Industrial Zone
  Outfall west of road on the north bank of the Salmon Brook just north of 335 Salmon Brook Street
  Drainage Basin No. 4319 - West Branch Salmon Brook

- **I2** - Industrial Zone
  Outfall from catch basin at the east end of the parking lot at 66 Floydville Road
  Drainage Basin No. 4300 - Farmington River

- **R1** - Residential Zone
  West outfall from Spring Glen Drive Cul-de-Sac
  Drainage Basin No. 4300 - Farmington River

- **R2** - Residential Zone
  Outfall from Catch basin at Intersection of Buttles Road and Old Simsbury
  Drainage Basin No. 4300 - Farmington River
Rainfall from the September 27, 2016 precipitation event was reported to 0.41" at a Granby Weather Underground station. A previous rainfall event of 0.10" or greater, occurred on September 19, 2016.

The originals of the six Stormwater Monitoring Report Forms for the September 27, 2016 stormwater sampling event were forwarded to Kirk Severance to be signed and dated. Original forms to the office of ecs so the scanned pdfs of the original forms could be forwarded to the CTDEEP.

The pdfs of the original forms were forwarded electronically to Chris Stone, P.E., CTDEEP MS4 Stormwater Permit Coordinator on November 04, 2016.

**Electronic Annual Report Certification Form**

It is anticipated that a signed and dated pdf of the 2016 Electronic Annual Report Certification Form will be submitted to the CTDEEP in late December 2016.