

Town of Ridgefield

Draft Annual Report - 2011

**General Permit for the Discharge of Stormwater from Small
Municipal Separate Storm Sewer Systems (MS4)**

Permit Number GSM 000041

December 2011



Introduction

The Town of Ridgefield is submitting this annual report as required by the Connecticut Department of Energy and Environmental Protection's (CT DEEP) "General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (Permit)".

This annual report will discuss the efforts the Town of Ridgefield is implementing to maintain the existing BMP's by the various town departments. The draft annual report has been made available to the public for the thirty-day review and comment, 11/30/11-12/30/11, period as required in the Permit guidelines.

Status of Compliance

The town has been completing regulatory tasks that meet the requirements of some or all of the minimum control measures listed in the SWP. The land development departments of the town (Engineering, Planning and Zoning, Health, Highway and Conservation Commission) complete these BMP's that were managed prior to the issuance of the Permit. This Permit has required the town to further expand its stormwater management practices to fulfill all of the BMP's listed in the minimum control measures developed for the SWP.

Stormwater Monitoring and Analytical Results

The town collected stormwater samples as required in the Permit guidelines, Section 6(h), following the stormwater sampling procedures and protocols. The discharge locations for the sampling criteria changed the locations used in 2010. The Stormwater Monitoring Report Forms (SMR) and a summary sheet listing all associated sample data are attached in Appendix A.

Permit Scheduling

The town will continue to conduct its BMP operations as required by town codes and ordinances and by the CT DEEP general permit. Listed in the tables below are the existing and proposed BMP's that the town conducts or is continuing to developing to achieve full permit compliance to meet all requirements of the minimum control measures (MCM).

Minimum Control Measures

1. Public Education and Outreach

BMP ID	Public Education – BMP Action	Responsible Department	Status
1-1	Wetlands Viewing Platform	Engineering	Open for viewing
1-2	Expand Haz. Waste & Recycling Brochures	Highway	Factsheet completed & available to public – Year 3
1-3	Pet Droppings Fact Sheet	Health	Factsheet completed &

Town of Ridgefield
Draft Stormwater Annual Report 2011

			available to public – Year 4
1-4	Illegal Connections Factsheet	Health	Factsheet completed & available to public – Year 5
1-5	Review 3 rd Party BMP's for Potential Use	Engineering	Completed annually at Team meeting
1-6	Link Existing\New BMP's to Stormwater Internet Page	Engineering	Completed during corresponding year
1-7	E&S Controls Seminar	P&Z	Scheduling Seminars
1-8	Harmful Chemicals at Home Brochure	Health	Factsheet complete – Year 4

The Town Highway Department has managed an e-waste recycling program for approximately 5 years, each year there has been an increase in material for recycle. The completion of the pamphlet entitled “Homeowner’s Guide to Soil Erosion Control” is mailed to all homeowners that obtain a Zoning Permit during each calendar year. This pamphlet has been created to educate homeowners about soil erosion and best management practices. The Health Department completed the brochure for the pet dropping fact sheet. The brochure was initially a third-party flyer that was modified to have a broader approach to pet dropping best management practices. The Ridgefield Garden Club has developed a “Good Gardening Practices” brochure that assists people in the management of gardening practices to reduce fertilizers and pesticides and improve composting strategies. This gardening brochure is available at the public counter in the Land Use Offices and the Ridgefield Public Library. In the summer of 2011, the garden club also held a composting seminar with residents.

2. Public Involvement/Participation

BMP ID	Public Participation – BMP Action	Responsible Department	Status
2-1	Develop Public Involvement & Participation Program	Engineering	The Town maintains a current policy.
2-2	Follow FOI Requirements	Engineering	The Town follows the State Statute.
2-3	Rid Litter Day	Highway	Completed annually, Conducted on 5/14/11.
2-4	Adopt-A-Street	Highway	The program is a year round clean up.
2-5	Waste Oil & Anti-Freeze Collection Day	Highway	Cancelled due to budget constraints
2-6	Hazardous Waste Collection Day (Multi Town)	Highway	Completed Bi-annually, Conducted on 5/21/11 in Newtown, CT and on 9/24/11 in Danbury, CT.

The Town manages many programs that require public involvement and participation in order for the programs to operate. The Town also follows the freedom of information act throughout all Town business. The various waste collection days that are completed throughout the year require public notification via newspaper ads, general flyer and brochure postings for effective program operation and outreach. The E-waste (electronic waste) recycle program that started on November 1, 2006 has removed approximately 300 tons of waste to date and has been relocated its operations to the recycle center for proper handling. All of these programs develop public participation to reduce pollutants and potential pollutants from migrating to the stormwater system and throughout the environment.

3. Illicit Discharge Detection and Elimination

BMP ID	Illicit Discharge Detection & Elimination – BMP Action	Responsible Department	Status
3-1	Map Outfalls Greater than 15” in UA’s	Engineering	Inventory of the stormwater structures is underway, being collected via GPS.
3-2	Map Outfalls Greater than 15” entire town	Engineering	Inventory of the stormwater structures is underway, being collected via GPS.
3-3	Map Outfalls Greater than 12” in UA’s	Engineering	Inventory of the stormwater structures is underway, being collected via GPS.
3-4	Program to Detect & Eliminate Illicit Discharges	Health	Currently the Health Department handles illicit discharges complaints
3-5	Develop Illicit Discharge Ordinance	Engineering & Health	The draft ordinance will be developed in the next issuance of the GP.
3-6	Base Map Development – Contingent on Procurement of Funds	Engineering	See details in MCM #3 regarding the timeline
3-7	Review of Septic Designs to Verify Proper Distances from Storm Sewer Systems	Health	Currently the Health reviews all septic designs to verify compliance
3-8	“FOG” Ordinance – Management of Grease Traps	Health	All restaurants are required to install a grease trap to collect associated wastes

The development of the Global Information System (GIS) base map is complete. The base map is integral to the development of the stormwater-mapping requirement of this MCM. The Engineering Department is conducting GPS surveys to locate all stormwater structures for mapping in the GIS. Currently, the town has located approximately 90% of the stormwater structures in the town. In addition to the stormwater structure locations; a database is being developed to supply attribute information for each feature of the stormwater system. The illicit discharge ordinance will be developed in the next issuance of the general permit. The current policies do not allow for an illicit discharge to be connected to the stormwater system. Attached in Appendix B is a memo from the Director of Health summarizing 2011. The Health Department with the WPCA held a FOG seminar on 3/21/11 with local business and restaurant owners. The seminar had several presenters; state, town and manufacturers of grease traps. This seminar had approximately 50 attendants and melds 3 of the town's MCM's at one event.

4. Construction Site Stormwater Runoff Control

BMP ID	Construction Site Runoff Control – BMP Action	Responsible Department	Status
4-1	Review Land Use Regulations	P&Z	Review of guidelines completed and deficiencies have been addressed.
4-2	Plan Review Completed by P&Z	P&Z	Included in Zoning Regulations
4-3	Plan Provides Calculations for Disturbed Areas	P&Z	Included in Zoning Regulations
4-4	Installation of Proper E&S Controls	P&Z	Included in Zoning Regulations
4-5	Inspection Procedures for E&S Controls	P&Z	Included in Zoning Regulations
4-6	Public Hearings and Pre-App Meetings with Public	P&Z	Included in Zoning Regulations
4-7	Add Reference to GP for Construction Site Dewatering	P&Z	Reference to the GP is made on appropriate applications
4-8	Complete On Site Trash Management policy	P&Z	Policy has been approved and is listed in the development application.

The Planning and Zoning Department conducts many of the plan review and site inspections of the erosion and sedimentation controls for this MCM. The Town Engineer conducts additional site plan review, site inspections and site-specific requirements of the erosion control practices. The Wetlands Inspector is continuing the enforcement of the Inland Wetlands and Watercourses Regulations. Also a pamphlet has been created to teach homeowners about soil erosion; entitled

“Homeowner’s Guide to Soil Erosion Control”. The Planning and Zoning Department requires larger site plan developers to have 3rd party reviews in addition to in-house town reviews to further verify all town and state stormwater management procedures are initiated. Attached in Appendix C are supporting documents from the Planning and Zoning Department detailing the 2011 operations to help eliminate construction stormwater runoff and erosion control mneasures.

5. Post-construction Stormwater Management in New Development and Redevelopment

BMP ID	Post Construction Runoff Control – BMP Action	Responsible Department	Status
5-1	Review Land Use Regulations	Engineering	BMP’s are proposed to address deficiencies See 5-2 thru 5-5
5-2	Develop Post Construction Ordinance	Engineering	Currently Site Plan Resolutions require certain sites to prepare post-construction stormwater monitoring plans.
5-3	Develop and Implement Post Construction BMP Strategy	Engineering	Current plan review may require developer to complete; Ordinance will require all sites to comply.
5-4	Develop Program to Ensure long-term O&M of BMP’s	Engineering	Current plan review may require developer to complete; Ordinance will require all sites to comply.
5-5	A BMP that will Require the Engineer to Certify the Site Complies with Phase II Goals	Engineering	Submission of plans that will provide research of Phase II.

The Planning and Zoning Department with the assistance from the Town Engineer; through its resolution of approval, may require site developers to establish, maintain and fund post-construction stormwater management plans (SMP). These site specific SMP’s may require a owner to develop stormwater system maintenance protocols established and/or bonding for the maintenance over a certain period of time after the subdivision/development has been completed.

6. Pollution prevention/good housekeeping for municipal operations

BMP ID	Good Housekeeping – BMP Action	Responsible Department	Status
6-1	Develop Training Program	Engineering	Use training from Phase I GP as outline

			for new program
6-2	Sweep Streets Once a Year	Highway	Completed annually each Spring
6-3	Evaluate Streets to Swept Twice a Year in UA	Highway	The secondary road sweep list changes due to need or lack of sweeping necessity.
6-4	Clean Stormwater Structures Once a Year	Highway	Completed annually until West Nile Monitoring begins
6-5	Develop a System to Repair and/or Replace MS4 Structures	Highway	The repairs completed as necessary and additions are completed in conjunction with road resurfacing projects.
6-6	Develop and Implement O&M Plan	Engineering	A O&M plan will be drafted and amended to the SWP

The Highway Department along with the Engineering Department designs, installs and maintains the storm drainage system located within the town. The Highway Department cleaned approximately 300 catch basins, flushed 250 of pipe, and installed 905 feet of new drainage pipe and 20 new catch basins. In addition, repairs were made to approximately 12 existing catch basins throughout the town. In [Appendix D](#), is a listing of BMP's completed by the Highway Department.

The Mamanasco Lake Improvement Fund has developed engineered plans to manage the stormwater system in the lake area. The plan includes a maintenance schedule and stormwater markings for all catchbasins in the area. The lake specific management plan and labeling is conducting by the Town of Ridgefield Highway Department. The plan is also attached in [Appendix D](#). Currently, the Engineering Department has contracted to have repairs made to the existing drainage system in and around Lake Mamanasco. This project is scheduled for completion prior to 2012, weather permitting.

The Highway Department is continuing to use Ice B' Gone treated salt material for snow and ice removal procedures since the winter of 2007/08. This allows for less sand to be used in the winter months. Listed in the table below are the quantities of salt, sand and treated salt from 2006/07 to present.

Winter	2006/07	2007/08	2008/09	2009/10	2010/11
Sand, tons	5312	2247	440	100	
Salt, tons	2020	744	184	65	
Ice B' Gone (treated salt), tons	0	2082	4737	3362	

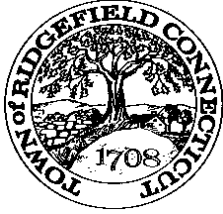
Town of Ridgefield
Draft Stormwater Annual Report 2011

Totals	7332	5073	5361	3527	
---------------	-------------	-------------	-------------	-------------	--

The use of the treated salt allows for less total product being used during the course of the winter, reducing sediment runoff. The reduction in the material allows the streets to be cleaned in a more timely manner in the spring and reduces the potential for the sand to migrate to a watercourse.

APPENDIX A
Stormwater Monitoring Report Forms

APPENDIX B
Health Department Memorandum



**Health Department
Water Pollution Control Authority
66 Prospect Street
Ridgefield, Connecticut 06877**

**F.O.G. Agenda
March 29, 2011
10:00-Noon**

- 1. Sign In and Refreshments**
- 2. Introductions**
 - a. Ed Briggs, Director of Health**
 - b. Michael McCarthy, Sanitarian**
 - c. Diana Van Ness, Water Pollution Control Authority**
- 3. Ilyana Ayala, Compliance Officer, DEP**
- 4. Charles Fisher, Town Engineer**
- 5. Jeff Pennell, WPCA/United Water**
- 6. Ken Post, Thermaco**

On September 30, 2005, the Department of Environmental Protection (DE) issued the “General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments. The FOG General Permit set a schedule for all Class III and Class IV Food Preparation Establishments (as defined by Section 19-13-B42 of the State of Connecticut Public Health Code), which discharge to public sanitary sewers, to be in compliance with the requirements of the permit no later than June 30, 2011. The responsibility for complying with the general permit rests with the discharger—the food preparation establishment.

The Ridgefield Health Department, Water Pollution Control Authority and the Engineering Department provided the restaurant owners with information necessary to comply with mandatory D.E.P. regulations pertaining to the discharge of Fats, Oils and Grease into the municipal sewer system.

The purpose of the FOG Workshop was to educate FSE’s because fats, oils and grease significantly impacts sewer systems as it builds up in the walls of pipes to the extent that a sewer stoppage or overflow can occur, leading to costly fines and clean-ups, and public health concerns, restaurant closure or revocation of food service licenses. The workshop was attended by 50 FSE personnel.

APPENDIX C
Planning & Zoning Department Memorandum

APPENDIX D
Highway Department Memorandum

MEMORANDUM

Date: November 21, 2011
To: Jake Muller
From: Ellen Rossini
Re: Annual Report - Storm Water Pollution Prevention Measures

This memo will serve to update your information on activities related to stormwater pollution prevention that took place between January 1, 2011 and November 21, 2011.

Street Sweeping

The Town of Ridgefield carries out a comprehensive street sweeping operation. In an effort to save money during this tough economy, the Highway Department swept all streets themselves. They relied on and used their own equipment and personnel to get the job done. This process, as always, is to ensure that all town roads are cleared of winter sand and debris as early as possible in the spring, weather permitting.

The first priority each year is to sweep roads located in environmentally sensitive watershed areas, such as Rainbow Lake, Lake Mamasasco, Pierrepont Lake, Fox Hill Lake, Great Pond and Twin Ridge. As soon as the winter weather breaks, work begins in these areas utilizing town resources, following up again with a second cleaning once our full scale sweeping operation is in gear, with town crews, as stated above. We also swept Main Street three times between May and October.

All roads designated for resurfacing are swept at least twice. In 2011 the road-resurfacing program totaled 6.69 miles of road. Listed below are the roads completed in 2011:

- Acorn Place
- Ashbee Lane
- Gilbert Street
- Haviland Road
- High Ridge Avenue (Partial)
- Ivy Hill Road (Partial)
- Lakeside Drive
- Lewis Drive
- Manor Road
- New Street (Partial)
- Old Wagon Road
- Peaceable Street (Partial)
- Prospect Ridge
- Richardson Drive
- Sharp Hill Lane
- Southridge Court

Drainage

This year the Town of Ridgefield has spent approximately \$85,000.00 to improve our stormwater system by repairing the existing infrastructure as well as installation of new catch basins and pipe. Again, we utilize town equipment and personnel, as well as a number of independent contractors to perform this work. In 2011, we repaired or replaced 12 catch basin sumps and 41 catch basin tops. We also installed 20 new sumps and 20 tops and laid 905 feet of new pipe. Overall, approximately 5,760 man-hours have been dedicated to drainage-related projects and work orders.

During the spring and fall, this department carries out a regular program of catch basin cleaning and pipe flushing, utilizing the town's vactor/jet truck and personnel. Again, the watershed areas are attended to first. Please note that in recent years, due to the seeding of basins by the Health Department to combat the spread of the West Nile Virus, this function has not been performed between July 1 and October 1 unless it is an emergency situation. In 2011, we were able to clean approximately 300 catch basins and flushed approximately 250 feet of pipe.

In addition, the utilization of our two excavators and backhoe to perform reclamation of silt from drainage channels and discharge areas as necessary is implemented. The approximate amount for the year was between 0 and 0 cubic yards of material removed.

Community Programs

The Town has a number of programs in place aimed at reducing the amount of potential pollutants entering the stormwater system. Below is a brief explanation of each.

➤ **Adopt-A-Street**

Mrs. Beth Yanity, an environmentally concerned resident, in cooperation with the Selectman's Office and this department, initiated this program approximately twelve years ago. Residents, businesses and associations volunteer to monitor and maintain the roads and right-of way, collecting and bagging garbage, which is picked up by the Highway Department staff. The timing of these clean-ups is decided by the volunteers that then advise the Highway Office when to schedule pickup and disposal. The Adopt-A-Street programs are done several times each year.

➤ **Rid Litter Day**

This program has been in place for over eighteen years and is sponsored by the town and several local environmental groups. "Rid Litter Day" was held on May 14, 2011. Residents are asked to pickup loose garbage and other debris, larger items (i.e. carpets, appliances, tires, etc.) that have been discarded along roadsides and to deliver them to designated drop-off sites located strategically throughout town. An all volunteer workforce took all trash and related items collected to the Ridgefield Transfer Station and Recycling Center for proper disposal.

➤ **Hazardous Materials Day**

The "Hazardous Waste Collection Day" is a cooperative effort by six area towns, under the direction of the Housatonic Resource Recovery Authority (HRRA), to allow residents to dispose of a large variety of chemicals, and other items that are known pollutants. This year, the spring collection day was held on May 21, 2011 at the Newtown Public Works facilities. The fall collection day was held on September 24, 2011, at the Danbury Public Works facilities with volunteers from each participating municipality.

➤ **E-Waste Collection**

On November 1, 2006 we instituted a program to remove from the waste stream and recycle computer components, televisions, stereos, fluorescent lamps and dry cell batteries. We are now contracted with We-Recycle for pick-up and processing to recover mercury and other hazardous materials from these items. Since this collection program was instituted, we have recovered in excess of 300 tons of material.

If you need any further information, please feel free to call our office at extension 1502.

Sincerely,

Ellen M. Rossini
Office Manager
Department of Public Services
Town of Ridgefield

cc: Peter Hill, Director of Public Services
Charles Fisher, Town Engineer