

2016 MS4 GENERAL PERMIT ANNUAL REPORT

TOWN OF AVON

60 WEST MAIN STREET
AVON, CONNECTICUT

DECEMBER 2016

PREPARED FOR:


DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
ATTENTION: MR. CHRISTOPHER STONE, P.E.
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SIGNATURE OF REPORT AUTHOR

The undersigned employee of CMG Environmental, Inc. (CMG) prepared and reviewed this document. Please direct any requests for additional information regarding the content of this document to this individual.



Matthew Reiser, CHMM
Compliance Specialist

12/30/16

Date

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1.0 INTRODUCTION

On December 8, 1999, the U.S. Environmental Protection Agency (US EPA) promulgated Phase II of its National Pollution Discharge Elimination System (NPDES) stormwater regulations. Phase I of the US EPA stormwater program established regulations for stormwater discharges from municipal separate storm sewer systems (MS4s) for municipalities with populations of 100,000 or greater, construction activities disturbing five or more acres of land, and ten categories of industrial facilities. The Phase II Final Rule expands the Phase I program by requiring smaller communities with MS4s in urbanized areas to implement programs and practices to control polluted stormwater runoff through the use of NPDES permits.

The Town of Avon is one of approximately 130 municipalities in Connecticut that are located either completely or partially within an urbanized area. These communities were mandated to seek coverage under the Connecticut Department of Energy & Environmental Protection (CT DEEP) Phase II Stormwater Program. CT DEEP issued the General Permit for the Discharge of Stormwater from Small Municipal Stormwater Sewer Systems (MS4 General Permit) on January 9, 2004. The permit was reissued on January 8, 2015 without changes and is set to expire on January 8, 2016.

Compliance with the CT DEEP MS4 General Permit was a two-part process. The first part was the submission of a registration form. The CT DEEP issued the Town of Avon registration number GSM000044. The second part was completion of a Stormwater Management Plan (SWMP). The Town originally prepared its SWMP in May 2004. The SWMP addresses how the Town of Avon will comply with the six minimum control measures required by the General Permit. These measures include:

- Public Education and Outreach on Stormwater Impacts;
- Public Involvement/Participation;
- Illicit Discharge Detection and Elimination;
- Construction Site Stormwater Runoff Control;
- Post-Construction Stormwater Management in New Development and Redevelopment;
and
- Pollution Prevention/Good Housekeeping.

1.1 PURPOSE

CMG Environmental, Inc. (CMG) has completed this 2016 MS4 General Permit Annual Report (the “Report”) on behalf of the Town of Avon located at 60 West Main Street, Avon, CT 06001. This Report was prepared to document the Town’s compliance status with the MS4 General Permit, specifically the six minimum control measures listed above.

1.2 REGISTRANT INFORMATION

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Avon, CT 06001

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2.0 MINIMUM CONTROL MEASURES & BEST MANAGEMENT PRACTICES

2.1 PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

- **Initiative:** Develop Public Education/Outreach Program - Develop programs and activities to inform public about MS4 General Permit and stormwater program and post information to the Town webpage.

Responsible party: Planning & Community Development

Timeline: Ongoing

Completion to date:

- 2009: - Telephone numbers for whom to contact for stormwater emergencies and non-emergencies have been posted on the Town website.
- The Farmington River Watershed Association (FRWA) began a study to get the Lower Farmington River/Salmon Brook designated as a National Wild and Scenic River. There's a link on the Town website with information regarding this designation.
- 2010: - The FRWA made presentations to all Town land use commissions (Planning & Zoning, Inland Wetlands, Natural Resources) and the Town Council. Written endorsements of the draft Management Plan were provided to FRWA.
- The Town received a \$50,000 grant from CT DEEP to look into Low-Impact Development (LID) initiatives to minimize the effects of stormwater. All Town regulations are being reviewed for impediments to the incorporation of LID. An informational meeting was held with all land use commissions with public participation.
- The Town received \$3,000 from CT DEEP for the purchase of rain barrels. 34 were purchased and distributed to residents on a first come/first served basis.
- 2011: - Draft changes to the Zoning and Subdivision regulations incorporating LID have been prepared and are being refined. Input was received from Planning & Zoning Commission, Natural Resources Commission, Inland Wetlands Commission and general public.
- An eagle scout added a metal decal to all of the newer catch basins that states "NO DUMPING - ONLY RAIN IN THE DRAIN".
- 2012: - The Town continues to support the FRWA in its efforts to designate the Farmington River as a National Wild and Scenic River. The management plan was published for review. Bills regarding the designation are currently pending in the Connecticut legislature, however, there has been no action. This has been discussed at a number of public meetings held by the Town's Natural Resources Commission.
- 2013: - The river designation bills are still pending in the Connecticut legislature. This continues to be a topic at public meetings held by the FRWA.
- 2014: - The river designation bills are still pending in the Connecticut legislature. This continues to be a topic at public meetings held by the FRWA.

2015: - The Connecticut Senate Committee on Energy and Natural Resources found no objections to the river designation bills, but there was no forward movement on them. This continues to be a topic at public meetings held by the FRWA.

2016: - The Senate bill passed, but the House bill has not. This continues to be a topic at public meetings held by the FRWA.

Future plans: Future updates and notifications to be completed on an as-needed basis.

2.2 PUBLIC INVOLVEMENT/PARTICIPATION

- **Initiative:** Comply with State and Local Public Notice and FOI Requirements.
Responsible party: Planning & Community Development
Timeline: Ongoing
Completion to date: Town complying with applicable state and local public notice and FOI requirements.
Future plans: Continue as necessary.
- **Initiative:** Develop Public Involvement/Participation Program.
Responsible party: Planning & Community Development
Timeline: Ongoing
Completion to date: In addition to Section 2.1, the Secret Lake community conducts a clean-up program annually.
Future plans: Continue as necessary.

2.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

- **Initiative:** Illicit Discharge Detection Program - Develop, implement and enforce a program to detect and eliminate existing illicit discharges.
Responsible party: Planning & Community Development
Timeline: Ongoing
Completion to date:
 - 2009: - No dry weather screenings conducted.
 - 2010: - Town attorney is reviewing and preparing a draft illicit discharge detection ordinance. No dry weather screenings conducted.
 - 2011: - Town attorney is reviewing and preparing a draft illicit discharge detection ordinance. No dry weather screenings conducted.
 - 2012: - A new stormwater ordinance was prepared and adopted. No dry weather screenings.
 - 2013: - No dry weather screenings were conducted.
 - 2014: - Dry weather screenings are routinely conducted by the Engineering Department.
 - 2015: - Dry weather screenings are routinely conducted by the Engineering Department.
 - 2016: - No dry weather screenings were conducted.**Future plans:** Town intends update this program on an as-needed basis.

- **Initiative:** Map all outfalls and stormwater discharge pipes.

Responsible party: Engineering Department

Timeline: Ongoing

Completion to date:

- 2009: - Mapping of point features (catch basins, outfalls, etc.) complete, but no piping systems yet.
- 2010: - Collected drainage info including structure type, flow status, pipe sizes, digital photos and system connectivity, but not added to GIS yet.
- 2011: - Began adding drainage info including structure type, flow status, pipe sizes, digital photos and system connectivity to GIS.
- 2012: - The majority of structures, excluding outfalls, have been located and connected with pipes, as determined through field inventory. During inventory process, flow (yes/no) and condition of structure were noted.
- 2013: - No progress made.
- 2014: - No progress made.
- 2015: - No progress made.
- 2016: - No progress made.

Future plans: Town intends to improve upon mapping based on more detailed information. Actual implementation will depend upon available resources (funding and personnel) and availability of information.

- **Initiative:** Household Hazardous Waste Collection and Recycling.

Responsible party: Department of Public Works

Timeline: Ongoing

Completion to date: Completed annually, usually April through November.

- 2009: - 92 households contributed
- 2010: - Town participated, but number of households contributing unknown.
- 2011: - 202 households contributed
- 2012: - 225 households contributed
- 2013: - 89 households contributed
- 2014: - Town participated, but number of households contributing unknown.
- 2015: - 159 households contributed
- 2016: - 154 households contributed

Future plans: Town will participate annually.

2.4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- **Initiative:** Ordinance/Regulatory Mechanism - Develop, implement and enforce a program that includes an ordinance to regulate polluted runoff emanating from construction sites.

Responsible party: Planning & Community Development

Timeline: Ongoing

Completion to date:

- 2009: - Planning and Zoning regulations, Subdivision regulations and Aquifer Protection regulations were reviewed and codified. Town received grant from CT DEEP to review existing impediments to incorporation of LID

techniques into local regulations and development of draft regulations to incorporate LID.

- 2010: - Town zoning map was amended to show the Level A aquifer protection area associated with the Aquarian Water Company/Nod Road well field. Aquifer protection info was updated to include all forms required for permits and/or registration of existing facilities.
- 2011: - Zoning regulations were modified to create an Avon Village Center Zone which encourages the use of LID principles, techniques and best management practices.
- 2012: - The Plan of Conservation and Development (POCD) was modified to create an Avon Village Center Zone which encourages the use of LID principles, techniques and best management practices.
- 2013: - Existing land use regulations continue to be reviewed for conformance with current E&SC standards/guidelines.
- 2014: - Existing land use regulations continue to be reviewed for conformance with current E&SC standards/guidelines.
- 2015: - Existing land use regulations continue to be reviewed for conformance with current E&SC standards/guidelines.
- 2016: - Minor changes were made to the Flood Plain regulations and the POCD was updated and approved.

Future plans: Town intends to monitor and enforce applicable construction site stormwater runoff controls.

- **Initiative:** Inspection Program - Inspection of construction sites greater than 1 acre to determine the overall compliance rate is being achieved by construction operators.

Responsible party: Engineering Department

Timeline: Ongoing

Completion to date:

- 2009: - Less than 5 violation notices were issued. All were followed up on and none resulted in stop work orders. Two “dumping” complaints in wetlands/watershed areas were investigated by the Planning Department.
- 2010: - 15-20 construction sites inspected and 1 violation notice issued. Routine inspections of 18 active sites/subdivisions, 4 written notices for E&SC violations and numerous routine and post-significant rainfall event phone calls/contacts made to address existing/potential E&SC issues by Planning Department.
- 2011: - 15-20 construction sites inspected, 1 violation notice issued. Routine inspections of 21 active sites/subdivisions, 3 written notices for E&SC violations, numerous field meetings to discuss potential E&SC issues, numerous routine and post-significant rainfall event phone calls/contacts made to address existing/potential E&SC issues by Planning Department.
- 2012: - 11 construction sites inspected, numerous verbal warnings were given. Routine inspections of 17 active sites/subdivisions, 2 stop work notices were issued for wetlands activities, numerous field meetings to discuss potential E&SC issues, numerous routine and post-significant rainfall

event phone calls/contacts made to address existing/potential E&SC issues by Planning Department.

- 2013: - 15 construction sites inspected, numerous verbal warnings were given, 5 notices of E&SC violations were issued. 1 stop work notice was issued for wetlands activity, numerous field meetings to discuss potential E&SC issues, numerous routine and post-significant rainfall event phone calls/contacts made to address existing/potential E&SC issues by Planning Department.
- 2014: - Several violation notices were issued. All were followed up on and none resulted in stop work orders.
- 2015: - Numerous inspections were conducted, including 9 larger active sites and a number of smaller independent lot developments/homeowner improvements. Numerous field meetings to discuss potential E&SC issues, numerous routine and post-significant rainfall event phone calls/contacts made to address existing/potential E&SC issues by Planning Department.
- 2016: - 102 construction permits were issued for excavation, including sanitary sewer connections, driveway and excavation within the Town right-of-way. There were numerous other sites under development within 2 active subdivision projects. 3 stop work orders were issued for E&SC violations. 2 violation notices for a wetlands complaint, numerous routine inspections were done on 9 larger active sites and numerous single family lots by Planning Department.

Future plans: Town intends to monitor and enforce applicable construction site stormwater runoff control.

2.5 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

- **Initiative:** Ordinance/Regulatory Mechanism - Develop, implement and enforce a program that includes an ordinance or the regulatory mechanism to require erosion and sediment (E&S) controls, as well as sanctions for non-compliance.

Responsible party: Planning & Community Development

Timeline: Ongoing

Completion to date: See Section 2.4

Future plans: Town intends to monitor and enforce applicable construction stormwater management in new development and redevelopment projects.

- **Initiative:** Inspection Program - Inspection of construction sites to determine the overall compliance rate is being achieved by construction operators.

Responsible party: Engineering Department

Timeline: Ongoing

Completion to date:

- 2009: - No stop work orders given or enforcement actions taken.
- 2010: - No stop work orders given or enforcement actions taken.
- 2011: - No stop work orders given or enforcement actions taken.
- 2012: - 2 stop work notices were issued for wetland activities.

2013: - 5 notices of E&SC violations were issued. 1 stop work notice was issued for wetland activity which resulted in an application to the local Inland Wetlands Commission.

2014: - No stop work orders given or enforcement actions taken.

2015: - No stop work orders given or enforcement actions taken.

2016: - No stop work orders given or enforcement actions taken.

Future plans: Town intends to monitor and enforce applicable construction site stormwater runoff control.

- **Initiative:** Inspect and Maintain Retention Basins and Structures.

Responsible party: Department of Public Works

Timeline: Ongoing

Completion to date:

2009: - Several drainage swales were cleaned/maintained. Dredging debris was removed from Secret Lake.

2010: - 43 retention basins/structures were cleaned/maintained.

2011: - Several drainage swales were cleaned/maintained.

2012: - Several drainage swales were cleaned/maintained.

2013: - Several drainage swales were cleaned/maintained.

2014: - Several drainage swales were cleaned/maintained.

2015: - Several drainage swales were cleaned/maintained.

2016: - 39 retention basins/structures were inspected/maintained and 6 drainage swales were cleaned/maintained.

Future plans: Town intends to continue to inspect and maintain retention basins and structures.

2.6 PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

- **Initiative:** Maintenance of Infrastructure.

Responsible party: Department of Public Works

Timeline: On-going

Completion to date:

2009: - 13 catch basins repaired/rebuilt

2010: - 43 catch basins repaired/rebuilt

2011: - 59 catch basins repaired/rebuilt

2012: - 45 catch basins and 2 head walls repaired/rebuilt

2013: - 92 catch basin tops installed during road paving projects, 20 repairs made to catch basins, responded to 37 drainage complaints

2014: - Unknown number of catch basins repaired/rebuilt

2015: - 114 catch basins repaired/rebuilt and responded to 53 drainage complaints

2016: - Unknown number of catch basins repaired/rebuilt

Future plans: Continued inspection and maintenance.

- **Initiative:** Catch Basin Inspection and Cleaning.
Responsible party: Department of Public Works
Timeline: On-going
Completion to date:
 - 2009: - 2,361 catch basins inspected/cleaned
 - 2010: - Approximately 2,600 catch basins inspected/cleaned
 - 2011 - 1,768 catch basins inspected/cleaned
 - 2012: - 1,891 catch basins inspected/cleaned
 - 2013: - 2,503 catch basins inspected/cleaned
 - 2014: - Unknown number of catch basins inspected/cleaned
 - 2015: - 2,692 catch basins inspected/cleaned
 - 2016: - Approximately 2,500 catch basins inspected/cleaned**Future plans:** Continued inspection and maintenance.

- **Initiative:** Street Sweeping.
Responsible party: Department of Public Works
Timeline: On-going
Completion to date: All Town streets (100 miles) and parking lots are swept annually.
Future plans: Continued annual sweeping.

- **Initiative:** Training of Municipal Staff in Methods to Prevent Stormwater Pollution from Municipal Activities.
Responsible party: Department of Public Works
Timeline: On-going
Completion to date: Training program has been developed, but not presented to Town employees yet.
Future plans: Training of Town employees.

3.0 ANNUAL STORMWATER MONITORING

The CT DEEP MS4 General Permit requires annual stormwater monitoring of at least two municipal stormwater outfalls from each of the three land uses (industrial, commercial and residential) for a total of six outfall locations. Monitoring parameters, procedures and storm event criteria are described in the General Permit.

The Town has selected sampling outfalls based on the land use(s) within the drainage areas of the outfalls, as well as practical considerations including accessibility and proximity to other sampling locations.

The Stormwater Monitoring Reports (SMRs) for 2016 are included in Appendix A.

