Town of Oxford

GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

2011

Annual Report

Permit No. GSM000008

Site No. 108-061

December 21, 2011

NYE PROJECT # 2009-005

NAFIS & YOUNG
Civil/Environmental Engineering & Surveying

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Introduction

The Town of Oxford submits the following Annual Report updating the status and compliance with the Town's Stormwater Management Plan. This report meets the State of Connecticut Department of Energy & Environmental Protection (CTDEEP) requirements as outlined in the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), section (i) Reporting and Record Keeping Requirements.

Any individuals that wish to comment on this annual report or the Town of Oxford's Stormwater Management Plan may contact Mr. Lawrence Secor at Nafis & Young Engineers, Inc at (203) 484-2148 or by email at larry.secor@nafisandyoung.com.

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1.0 History

The Town of Oxford began working on a stormwater plan during the winter of 2002/2003 to meet a projected implementation date of April 2003. The Town worked with Nafis &Young Engineers, Inc. (NYE) in developing and writing this plan. The Town completed a draft plan after receiving a final copy of the CTDEEP general permit requirements on January 9, 2004. The "State of Connecticut Department of Transportation Draft Stormwater Management Plan" was used as an outline for the Town's plan.

In 2004 the written plan was then given to the appropriate personnel within the Town of Oxford's Conservation Commission/ Inland Wetlands Agency, Planning & Zoning Commission and Public Works, the town posted a legal notice in both the Town Hall and the Public Library to inform the public that a copy of the plan was available in the Town Library for review by residents. The town did not receive any comments from the public.

In early 2005 the final draft of the plan was completed and is now available at the both the Town Hall and Public Library. In 2005 the Council of Governments of the Central Naugatuck Valley (COGNAV) arranged with TeleMedia Cable to air an EPA video on local public access television entitled "*After the Rain*" on two nights in December. A brochure created in conjunction with the Oxford Conservation Commission/Inland Wetlands Agency that details the importance of storm water quality and the impact on the environment was distributed at the Town Hall and the Town Library. The Town also posted a poster in the Public Works garage and Town Hall to promote public awareness best management practices of storm water management during construction.

NYE has conducted eight annual stormwater sampling events starting in the summer of 2004. Samples of six representative outfalls, two industrial, two commercial and two residential were taken on July 23, 2004, June 28, 2005, August 15, 2006, May 16, 2007, April 28, 2008, September 11, 2009, November 04, 2010 and May 04, 2011.

The Town purchased a handheld GPS/PDA system for mapping its stormwater outfalls and the required software to manage the collected data. This equipment and software was partially funded through a CTDEEP grant with the COGNAV. The Town Engineer's department is currently mapping the town outfalls and will turn over to the GPS/PDA and software to the Town's Public Works Department for future use and maintenance in the near future. A map of the town's outfalls (mapped to date) is posted in the Conservation Commission/Inland Wetlands Agency Office and a copy is included in this report.

The Town's Inland Wetland Secretary initiated the storm drain-marking program with the initial labels being provided by the CTDEEP Office of Long Island Sound Programs. The town intends to move forward with volunteers assisting in labeling all the remaining catch basins. Two articles appeared in the local Waterbury Republican American Newspaper (November 16, 2006) and the Voices Newspaper (November 22, 2006)

discussing this storm drain-marking program. Approximately 20% of the Town's catch basins have been marked.
The Town is actively involved in the CTDEEP Aquifer Protection Area (APA) program. In 2009 the Town adopted its APA regulations and in 2010 updated the regulations.

The Town plan for E-waste recycling was approved and implemented at the Town's Transfer station.

In 2011, the Town re-registered the Public Works Garage and Transfer Station for the revised CTDEEP General Permit for the Discharge of Stormwater Associated with Industrial Activity. The Town performed the required stormwater outfall sampling in the October-December 2011 quarter.

The Town of Oxford participated in the "Household Hazardous Waste Collection Central Naugatuck Valley Planning Region" three collections on April 16,2011, July 16, 2011 and October 16, 2011. According to the statistics approximately eighty-nine households in the Town participated in this program. Each household depending on size generates approximately 7-15 gallons or pounds of hazardous waste.

At this time, the town is awaiting any comments from the DEP concerning the Town's Draft Stormwater Management Plan. This annual report is based upon the draft plan comments by the DEP will be reflected in subsequent annual reports.

2.0 Compliance

Many of the Town's goals for the eight year of this permit were to continue to build a foundation for further implementation of the Stormwater Management Plan. The Town such as Planning and Zoning and Inland Wetland enforcement inspections is already following many procedures. Construction plan reviews have included reviewing stormwater management and erosion controls and the town will continue these procedures while looking at ways to improve their effectiveness. A large share of the effort was directed towards the education of Town officials and employees with regards to their role within the General Permit. The Best Management Practices (BMPs) chosen by the Town are addressed below:

Section 1: Public Education and Outreach

1. Brochures / Fact Sheets

   Goal: Display and Distribute Brochures

   The finished brochure was distributed at a Conservation Commission /Inland Wetlands Agency meeting in early 2005. It was approved for publication and was distributed at the Town Hall and the Library. It continues to be available to the public.

2. Alternative Information Sources

Goal: Develop web site, display poster for Town, and Public Service Announcement (PSA) for local television

The web site is active and information is posted. The poster has been displayed at the Town Hall and the Public Works Garage. In December of 2005, the local cable company aired an EPA video entitled *After the Rain* on two nights.

Two USEPA brochures have been included in this report's appendices "Make your home The Solution to Stormwater Pollution!, A Homeowners Guide to Healthy Habits for Clean Water" and "After the Storm, A Citizen's Guide to Understanding Stormwater" so they will be seen on the web site posting of this annual report.

3. Library of Educational Materials

Goal: Make information available to town employees and the community

A library of educational materials is being developed and maintained at the CTDOT headquarters. As these materials are made available to the various towns in the state, materials will be procured for the various town departments as a reference for stormwater management issues.

Information on Internet websites (USEPA, CTDEEP) has also been used for reference and ideas.

4. Storm Drain / Marking Stenciling

Goal: The Town applied to CTDEEP for the drain-marking kit and received some labels for this purpose. In late 2006 on initiative by Ms. Anna Silva (ZEO) storm drain marking was started and now the Town is looking for resources/volunteers to continue with the program. Brochures were distributed to the local street residences as the labeling occurred on their respective streets.

In 2009 approximately 20% of the catch basins were marked. This program will be reviewed in 2012 and determine how best to move it forward with volunteers or town resources.

5. Watercourse Signage

Goal: Determine what watercourses and how best to expand CTDOT tributary signage program

The CTDOT already maintains signage for certain watercourses within the Town. Officials from the Town are currently looking for areas within the Town to expand this program.

Section 2: Public Involvement / Participation

1. Presentation of Draft SWMP

   Goal: SWMP

   The final SWMP was completed in February 2005 and was made available to certain officials within the Town. It was also made available for review by the public after the posting of a public notice in the local newspaper.

   This plan was updated in early 2009. The Town assigned Commissions (Conservation/Inland Wetlands and Planning & Zoning Commission) as well as the Public Works Department have taken ownership of their respective parts of the Plans and are implementing them as required.

2. Public Information Meetings

   Goal: Brochures distributed

   A brochure has been created and distributed by the Conservation Commission/Inland Wetlands Agency and is available at the Town Hall and Public Library.

3. Storm Drain / Marking Stenciling

   Goal: The Town implemented this program in late 2006 and is working toward lining up volunteers and funding to continue this program. Due to a lack of volunteers the process has slowed. It will be pushed again in Spring 2010.

4. Lake and Watershed Associations / Authorities

   Goal: Identify all local watershed Associations / Authorities and meet with representatives of all local groups

   Associations have been contacted and discussions continue on how to best involve the resources of these groups.

Section 3: Illicit Discharge Detection and Elimination

1. Town Policy Regarding Non-Stormwater Discharges
   Goal: Implement Policy

The town's Board of Selectmen passed an Illicit Discharge and Connection Stormwater Ordinance in 2008 and assigned responsibility for enforcement to the Town's Planning & Zoning Commission.

2. Storm Sewer Map(s)

   Goal: Mapping outfalls

   The Town, using its Global Positioning System (GPS), PDA and associated software mapped all outfalls 15" or greater in the "urbanized" areas of the Town in 2005.

   In 2006 through 2007 outfalls 15" or greater the mapping has expanded and will be continued until all outfalls are mapped town wide.

3. Illicit Discharge and Elimination Program

   Goal: Continue sampling of six selected outfalls. Start sampling outfalls for ecoli to determine TMDL contribution from other outfalls.

   Working with NYE, the Town selected six outfalls (two residential, two industrial, and two commercial) to be sampled and tested. These six outfalls were sampled according to the CTDEEP's requirements during the 2011 season and the results are included in this report.

   The Town did not sample any additional outfalls for ecoli to determine TMDL in 2011 but will review again in 2012.

4. Future Illicit Discharge Detection and Elimination

   Goal: Address and enforce future non-stormwater discharges

   The Town reviews each outfall during the mapping process and collects data on the condition of the stormwater discharges as observed. This information is being reviewed and the Town will investigate any suspect reports of illicit discharges.

   The Town has written an Illicit Discharge Detection and Elimination Manual for distribution and training purposes.

Section 4: Construction Site Stormwater Runoff Control

1. Requirements and Guidelines for Erosion and Sediment Controls

   Goal: Implement and enforce the ordinance.

In 2008 the Town's Board of Selectmen passed a "Stormwater Management Ordinance" and assigned responsibility for enforcement to the Town's Planning & Zoning Commission, its agents and the Town Engineer.

The Town has stepped up both its initial review of any new or purposed construction projects and continues enforcement inspections of active projects to ensure erosion and sediment controls are in accordance with all local, state and federal regulations.

2. Procedures for Notifying Construction Site Developers and Operators of Requirements for Registration

   Goal: Implement Town forms and makes the proper registration a condition of agency approvals for sites exceeding the 1- acre threshold

   The Town continues to comply with all requirements of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities.

3. Requirements for Construction Site Operators to Implement Appropriate Erosion and Sediment Control Best Management Practices

   Goal: Continue requirements for construction site operators to implement appropriate erosion and sediment control best management practices

   Planning & Zoning and Inland Wetland Agency enforcement inspections continue to ensure that all applicable regulations concerning the use of erosion and sediment control measures are followed.

   Site inspection and enforcement of control measures are utilized on all of the Town's projects. Under the new ordinance there are three levels of Town enforcement. Initially the inspector issues a "Notice of Inspection" for corrections to any deficiencies. This is followed with a "Notice of Deficiency" with set time requirements for correction of any issues. This may be used up to two times. Sites which continue to be noncompliant are issued a "Cease and Desist Order " with penalty and must stop work and bring the site into compliance before proceeding.

4. Requirements for Construction Site Operators to Control Waste at the Site

   Goal: Continue requirements for construction site operators to control waste at the site

   Planning & Zoning and Inland Wetland Agency enforcement inspections currently ensure that all applicable regulations concerning waste control are followed.

5. Procedures for Site Plan Review

   Goal: Continue site plan review procedures

   The Town Engineer reviews all site plans for conformance to the Town's, state and federal requirements relating to construction site runoff control.

6. Future Illicit Discharge Detection and Elimination

   Goal: Detect and address future non-stormwater discharges

   The Town during the mapping process reviews each outfall and collects data on the condition of the stormwater discharges as observed. This information is being reviewed and the Town will investigate any suspect reports of illicit discharges.

7. Requirements and Guidelines for Erosion and Sediment Controls

   Goal: To protect the town's surface water resources during construction activities greater than 1 acre in size.

   The Town has stepped up both its initial review of any new or purposed construction projects and continues enforcement inspections of active projects to ensure erosion and sediment controls are in accordance with all local, state and federal regulations.

8. Procedures for Notifying Construction Site Developers and Operators of Requirements for Registration

   Goal: Implement registration requirements for all projects exceeding the 1-acre threshold

   The Town currently complies with all requirements of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities.

9. Requirements for Construction Site Operators to Implement Appropriate Erosion and Sediment Control Best Management Practices

   Goal: Continue requirements for construction site operators to implement appropriate erosion and sediment control best management practices

   Planning & Zoning and Inland Wetland Agency enforcement inspections currently ensure that all applicable regulations concerning the use of erosion and sediment control measures are followed.

10. Requirements for Construction Site Operators to Control Waste at the Site

Goal: Continue requirements for construction site operators to control waste at the site

Planning & Zoning and Inland Wetland Agency enforcement inspections currently ensure that all applicable regulations concerning waste control are followed.

11. Procedures for Site Plan Review

Goal: Continue site plan review procedures

The Town Engineer reviews all site plans for conformance to the Town's, state and federal requirements relating to construction site runoff control.

12. Procedures for Receipt and Consideration of Information Submitted by the Public

Goal: Continue procedures for receipt and consideration of information submitted by the public.

Information submitted by the public is forwarded to the appropriate Town department for consideration.

13. Procedures for Site Inspection and Enforcement of Control Measures

Goal: Continue site inspection and enforcement of control measures

Site inspection and enforcement of control measures are utilized on all of the Town's projects.

Section 5: Post Construction Site Runoff Control

1. Requirements for Structural and Non-Structural BMPs

Goal: Continue implementation of BMPs including projects with greater than or equal to 1- acre in disturbance area

The Town Engineer currently reviews plans to evaluate stormwater discharges and the methods that may be used for the treatment of stormwater before it reaches an outlet.

2. Procedures for Addressing Post Construction Runoff from Construction and Reconstruction Projects

Goal: Continue procedures for addressing post construction runoff from construction and reconstruction projects with greater than or equal to 1-acre in disturbance area

An internal memorandum issued to all Town departments requires stormwater management BMPs for all projects.

3. Ensuring Long Term Operation and Maintenance of Best Management Practices

Goal: Continue operation and maintenance of BMPs

The Public Works Department is responsible for the long-term operation and maintenance of the Town's facilities.

Section 6: Pollution Prevention / Good Housekeeping

1. Operation and Maintenance Program

Goal: Implement operation and maintenance requirements

The Town is continuing to identify the specifics of the training, record keeping, internal reporting, and maintenance that will be required as part of operation and maintenance plan related to stormwater management.

2. Employee Training Program

Goal: Develop employee-training curriculum

The Town Engineer has developed curriculum for training the subject material and will continue to conduct classes with those individuals that require training.

3. Street Sweeping Program

Goal: Implement street sweeping requirements.

The Public Works Department swept 100% of its roadways, parking lots and facilities during the 2011 year .

4. Catch Basin Maintenance Program

Goal: Implement catch basin maintenance requirements

The Town cleaned one thousand (1000) or thirty-eight percent (38%) of the Town's two thousand six hundred (2,600) catch basins in 2011. The Town's

Public Works Department also continued using a comprehensive spreadsheet for tracking this information.

5. Preventative Maintenance Program

Goal: Implement preventative maintenance requirements

The Town conducts inspections as a part of new construction /reconstruction projects to identify existing drainage facilities that may be in need of repair or inadequate. During the past year (2011), the Town rebuilt approximately one-mile of Great Hill Road, which included 3,500 feet of new stormwater sewer pipe, forty-three new catch basins and 1,560 square yds of reclaimed road..

3.0 Monitoring Data

The Monitoring laboratory analyses data for the 2011 year Phase I (PWG/Transfer Station) and Phase II (MS4) Stormwater sampling are is included in Appendix I.

4.0 Summary of Planned Stormwater Activities During the Next Reporting Cycle

Continued growth within the Town is being undertaken with an eye towards improving stormwater management. Developers who are working in areas where the existing stormwater infrastructure is not able to meet the needs of their planned construction are required to install or upgrade the stormwater infrastructure as part of their development. The Public Works Department will continue its Preventative Maintenance Program. The Public Works Department and the Town Engineer will continue to map the Town's outfalls. The implemented ordinances and any changes in the General Permit will be review by the appropriate Town's Commission. Continued training will be performed within the appropriate Town Departments and Commissions.

5.0 Changes In Any Identified Measurable Goals or Implementation Dates

The Town will continue to work towards meeting all of the deadlines as specified in the updated Stormwater Management Plan. Any delays in meeting the requirements of the plan will be identified and fixed within the constraints of the workloads of the various Town Departments and the Town budget.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

Signature of CEO/PEO or designee

Date: 12-27-11

George R. Temple
Name of CEO/PEO or designee

First Selectman
Title

Prepared By:
Nafis and Young Engineers, Inc.

Signature of Preparer

Date: 12/21/2011

Lawrence K. Secor, CHMM
Name of Preparer

Senior Environmental Project Manager
Title

APPENDIX I

STORMWATER MONITORING REPORTS

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

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Oxford

Mailing Address: 21 Great Oak Rd. Oxford, CT 06478

Contact Person: Wayne Watt Title: Road Foreman

Phone: 203.888.7716 Permit Registration #GSM: 0000008

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): NAD 83: 41o 27' 25" N, 073o 06' 07"W (R-1)

Please check the appropriate area description: ☐ Industrial ☐ Commercial ☒ Residential

Receiving Water (name, basin): Little River, 6920

Time of Start of Discharge: 12:30 PM

Date/Time Collected: 05/04/2011, 02:23 PM Water Temperature: 11.5 C

Person Collecting Sample: Eric Swift

Storm Magnitude (inches): 0.4" Storm Duration (hours): 8

Date of Previous Storm Event: 04/23/2011

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM 5400-H+ B	6.5 (S.U.)	CT TESTING LABORATORIES, INC.
Rain pH	Extech Exstik	4.8 (S.U.)	FIELD
Hardness	2340 B	8 (mg/L)	CT TESTING LABORATORIES, INC.
Conductivity	2510B	51 (µmhos/cm)	CT TESTING LABORATORIES, INC.
Oil & Grease	1664 A	2.5 (mg/L)	CT TESTING LABORATORIES, INC.
COD	410.4	21 (mg/L)	CT TESTING LABORATORIES, INC.
Turbidity	180.1	10.7 (NTU)	CT TESTING LABORATORIES, INC.
TSS	2504D	16 (mg/L)	CT TESTING LABORATORIES, INC.
TP	365.3	0.11 (mg/L)	CT TESTING LABORATORIES, INC.
Ammonia	350.1	0.12 (mg/L)	CT TESTING LABORATORIES, INC.
TKN	351.2	0.64 (mg/L)	CT TESTING LABORATORIES, INC.
NO_3+NO_2	4500-NO3 F	0.4 (mg/L)	CT TESTING LABORATORIES, INC.
E. coli	9222B/9222G	750(cnt/100ml)	CT TESTING LABORATORIES, INC.

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Mary Ann Drayton-Rogers, First Selectman
(Print Name)

Signature: Mary Ann Drayton-Rogers Date: 5/18/2011

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

Stormwater Monitoring Report Form

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Oxford

Mailing Address: 21 Great Oak Rd. Oxford, CT 06478

Contact Person: Wayne Watt Title: Road Foreman

Phone: 203.888.7716 Permit Registration #GSM: 0000008

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): NAD 83: 41o 27' 40" N, 073o 08' 14"W (I-2)

Please check the appropriate area description: ☒ Industrial ☐ Commercial ☐ Residential

Receiving Water (name, basin): Little River, 6920

Time of Start of Discharge: 12:30 PM

Date/Time Collected: 05/04/2011, 03:10 PM Water Temperature: 10.0 C

Person Collecting Sample: Eric Swift

Storm Magnitude (inches): 0.4" Storm Duration (hours): 8

Date of Previous Storm Event: 04/23/2011

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM 5400-H+ B	6.8 (S.U.)	CT TESTING LABORATORIES, INC.
Rain pH	Extech Exstik	4.8 (S.U.)	FIELD
Hardness	2340 B	23 (mg/L)	CT TESTING LABORATORIES, INC.
Conductivity	2510B	118 (µmhos/cm)	CT TESTING LABORATORIES, INC.
Oil & Grease	1664 A	ND (<5 mg/L)	CT TESTING LABORATORIES, INC.
COD	410.4	12 (mg/L)	CT TESTING LABORATORIES, INC.
Turbidity	180.1	4.4 (NTU)	CT TESTING LABORATORIES, INC.
TSS	2504D	6 (mg/L)	CT TESTING LABORATORIES, INC.
TP	365.3	0.02 mg/L)	CT TESTING LABORATORIES, INC.
Ammonia	350.1	0.09 (mg/L)	CT TESTING LABORATORIES, INC.
TKN	351.2	0.39 (mg/L)	CT TESTING LABORATORIES, INC.
NO_3+NO_2	4500-NO3 F	0.3 (mg/L)	CT TESTING LABORATORIES, INC.
E. coli	9222B/9222G	50 (cnt/100ml)	CT TESTING LABORATORIES, INC.

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Mary Ann Drayton-Rogers, First Selectman
(Print Name)

Signature: Mary Ann Drayton-Rogers Date: 5/18/2011

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Town: Oxford

Mailing Address: 21 Great Oak Rd. Oxford, CT 06478

Contact Person: Wayne Watt Title: Road Foreman

Phone: 203.888.7716 Permit Registration #GSM: 0000008

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): NAD 83: 41o 26' 15" N, 073o 04' 14"W (I-1)

Please check the appropriate area description: ☒ Industrial ☐ Commercial ☐ Residential

Receiving Water (name, basin): Little River, 6920

Time of Start of Discharge: 12:30 PM

Date/Time Collected: 05/04/2011, 03:25 PM Water Temperature: 10.3 C

Person Collecting Sample: Eric Swift

Storm Magnitude (inches): 0.4" Storm Duration (hours): 8

Date of Previous Storm Event: 04/23/2011

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM 5400-H+ B	6.8 (S.U.)	CT TESTING LABORATORIES, INC.
Rain pH	Extech Exstik	4.8 (S.U.)	FIELD
Hardness	2340 B	15 (mg/L)	CT TESTING LABORATORIES, INC.
Conductivity	2510B	44 (µmhos/cm)	CT TESTING LABORATORIES, INC.
Oil & Grease	1664 A	ND (mg/L)	CT TESTING LABORATORIES, INC.
COD	410.4	10 (mg/L)	CT TESTING LABORATORIES, INC.
Turbidity	180.1	18.5 (NTU)	CT TESTING LABORATORIES, INC.
TSS	2504D	32 (mg/L)	CT TESTING LABORATORIES, INC.
TP	365.3	0.06 (mg/L)	CT TESTING LABORATORIES, INC.
Ammonia	350.1	0.08 (mg/L)	CT TESTING LABORATORIES, INC.
TKN	351.2	0.80 (mg/L)	CT TESTING LABORATORIES, INC.
NO_3+NO_2	4500-NO3 F	0.2 (mg/L)	CT TESTING LABORATORIES, INC.
E. coli	9222B/9222G	100(cnt/100ml)	CT TESTING LABORATORIES, INC.

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Mary Ann Drayton-Rogers, First Selectman
(Print Name)

Signature: Mary Ann Drayton-Rogers Date: 5/18/11

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79 ELM STREET
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Town: Oxford

Mailing Address: 21 Great Oak Rd. Oxford, CT 06478

Contact Person: Wayne Watt Title: Road Foreman

Phone: 203.888.7716 Permit Registration #GSM: 0000008

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): NAD 83: 41o 24' 19" N, 073o 05' 35"W (C-2)

Please check the appropriate area description: ☐ Industrial ☒ Commercial ☐ Residential

Receiving Water (name, basin): Little River, 6920

Time of Start of Discharge: 12:30 PM

Date/Time Collected: 05/04/2011, 2:03 PM Water Temperature: 12.5 C

Person Collecting Sample: Eric Swift

Storm Magnitude (inches): 0.4" Storm Duration (hours): 8

Date of Previous Storm Event: 04/23/2011

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM 5400-H+ B	6.7 (S.U.)	CT TESTING LABORATORIES, INC.
Rain pH	Extech Exstik	4.8 (S.U.)	FIELD
Hardness	2340 B	10 (mg/L)	CT TESTING LABORATORIES, INC.
Conductivity	2510B	38 (µmhos/cm)	CT TESTING LABORATORIES, INC.
Oil & Grease	1664 A	5.6 (mg/L)	CT TESTING LABORATORIES, INC.
COD	410.4	29 (mg/L)	CT TESTING LABORATORIES, INC.
Turbidity	180.1	58.9 (NTU)	CT TESTING LABORATORIES, INC.
TSS	2504D	63 (mg/L)	CT TESTING LABORATORIES, INC.
TP	365.3	0.23 (mg/L)	CT TESTING LABORATORIES, INC.
Ammonia	350.1	0.21 (mg/L)	CT TESTING LABORATORIES, INC.
TKN	351.2	2.60 (mg/L)	CT TESTING LABORATORIES, INC.
NO_3+NO_2	4500-NO3 F	0.3 (mg/L)	CT TESTING LABORATORIES, INC.
E. coli	9222B/9222G	300(cnt/100ml)	CT TESTING LABORATORIES, INC.

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Mary Ann Drayton-Rogers, First Selectman
(Print Name)

Signature: Mary Ann Drayton-Rogers Date: 5/18/11

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79 ELM STREET
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PERMITTEE INFORMATION

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Contact Person: Wayne Watt Title: Road Foreman

Phone: 203.888.7716 Permit Registration #GSM: 0000008

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): NAD 83: 41o 25' 12" N, 073o 06' 15"W (C-1)

Please check the appropriate area description: ☐ Industrial ☒ Commercial ☐ Residential

Receiving Water (name, basin): Little River, 6920

Time of Start of Discharge: 12:30 PM

Date/Time Collected: 05/04/2011, 03:35 PM Water Temperature: 11.8 C

Person Collecting Sample: Eric Swift

Storm Magnitude (inches): 0.4" Storm Duration (hours): 8

Date of Previous Storm Event: 04/23/2011

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM 5400-H+ B	6.5 (S.U.)	CT TESTING LABORATORIES, INC.
Rain pH	Extech Exstik	4.8 (S.U.)	FIELD
Hardness	2340 B	15 (mg/L)	CT TESTING LABORATORIES, INC.
Conductivity	2510B	108 (µmhos/cm)	CT TESTING LABORATORIES, INC.
Oil & Grease	1664 A	ND (<5.0mg/L)	CT TESTING LABORATORIES, INC.
COD	410.4	27 (mg/L)	CT TESTING LABORATORIES, INC.
Turbidity	180.1	16.0 (NTU)	CT TESTING LABORATORIES, INC.
TSS	2504D	34 (mg/L)	CT TESTING LABORATORIES, INC.
TP	365.3	0.23 mg/L)	CT TESTING LABORATORIES, INC.
Ammonia	350.1	1.03 (mg/L)	CT TESTING LABORATORIES, INC.
TKN	351.2	1.83 (mg/L)	CT TESTING LABORATORIES, INC.
NO_3+NO_2	4500-NO3 F	0.4 (mg/L)	CT TESTING LABORATORIES, INC.
E. coli	9222B/9222G	200(cnt/100ml)	CT TESTING LABORATORIES, INC.

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Mary Ann Drayton-Rogers, First Selectman
(Print Name)

Signature: Mary Ann Drayton-Rogers Date: 5/18/11

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

Stormwater Monitoring Report Form

Please send completed form to: STORMWATER GROUP
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Oxford

Mailing Address: 21 Great Oak Rd. Oxford, CT 06478

Contact Person: Wayne Watt Title: Road Foreman

Phone: 203.888.7716 Permit Registration #GSM: 0000008

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): NAD 83: 41o 25' 22" N, 073o 07' 34"W (R-2)

Please check the appropriate area description: ☐ Industrial ☐ Commercial ☒ Residential

Receiving Water (name, basin): Little River, 6920

Time of Start of Discharge: 12:30 PM

Date/Time Collected: 05/04/2011, 02:50 PM Water Temperature: 9.5 C

Person Collecting Sample: Eric Swift

Storm Magnitude (inches): 0.4" Storm Duration (hours): 8

Date of Previous Storm Event: 04/23/2011

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM 5400-H+ B	6.7 (S.U.)	CT TESTING LABORATORIES, INC.
Rain pH	Extech Exstik	4.8 (S.U.)	FIELD
Hardness	2340 B	21 (mg/L)	CT TESTING LABORATORIES, INC.
Conductivity	2510B	206 (µmhos/cm)	CT TESTING LABORATORIES, INC.
Oil & Grease	1664 A	ND (<5 mg/L)	CT TESTING LABORATORIES, INC.
COD	410.4	ND (mg/L)	CT TESTING LABORATORIES, INC.
Turbidity	180.1	2.3 (NTU)	CT TESTING LABORATORIES, INC.
TSS	2504D	11 (mg/L)	CT TESTING LABORATORIES, INC.
TP	365.3	0.02 mg/L)	CT TESTING LABORATORIES, INC.
Ammonia	350.1	0.10 (mg/L)	CT TESTING LABORATORIES, INC.
TKN	351.2	0.32 (mg/L)	CT TESTING LABORATORIES, INC.
NO_3+NO_2	4500-NO3 F	0.3 (mg/L)	CT TESTING LABORATORIES, INC.
E. coli	9222B/9222G	100(cnt/100ml)	CT TESTING LABORATORIES, INC.

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the MS4 General Permit. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: Mary Ann Drayton-Rogers, First Selectman
(Print Name)

Signature: Mary Ann Drayton-Rogers Date: 5/18/11

General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011
Stormwater Monitoring Report Form
Sector G - Municipal or Federal Facilities

Facility Information

Permittee Name: Town of Oxford Site Name: Oxford PWG/CTL Sample No. 14712
Mailing Address: 21 Great Oak Rd., Oxford, CT 06478
Contact Person: Wayne Watt Title: Road Foreman
Business Phone: 203.888.7716 ext.: ____ Email: wayne.watt@oxfordpublicworks.com
Site Address: 21 Great oak Rd. Oxford, CT 06478
Receiving Water (name/basin): Eight mile Brook /6023-09-1
Permit #: GSI 001215 Primary SIC: 9199
Discharges into an Impaired Waterbody: Yes ☒ No ☐ (If yes, complete the table on page 3 of this form)

Sample Information

Sample Location: 41.42673N, -73.14443W (Xfer Station) DSN-02 Person Collecting Sample: Larry Secor
Date/Time Collected: 10/27/11 / 07:28 AM Date of Previous Storm Event: 10/20/2011
This report is for samples required: Semi-annually ☒ Annually ☐ Other ☐
Check here if the sample contains **snow or ice melt**: ☐
Check here if a benchmark exceedance is solely due to background or off site sources ☐ see note below

Monitoring Results

Parameter	Required Frequency	Results (units)	Benchmark	Benchmark Exceedance (see pg 4)	Test Method	Laboratory Name
Oil & Grease	Semi-annual	2.6 mg/L	5.0 mg/L	☐	EPA 1664A	CTLPH0547
Rainfall pH	Semi-annual	4.73	n/a		CP 20	
Sample pH	Semi-annual	6.5	5-9 SU	☐	SM 4500H/B	CTL PH0547
COD	Semi-annual	123 mg/L	75 mg/L	☒	EPA 410.4	CTL PH0547
TSS	Semi-annual	42 mg/L	90 mg/L	☐	SM 2540D	CTL PH0547
TP	Semi-annual	0.37 mg/L	0.40 mg/L	☐	EPA 365.3	CTL PH0547
TKN	Semi-annual	3.28 mg/L	2.30 mg/L	☒	EPA 351.2	CTL PH0547
NO_3-N	Semi-annual	2.10 mg/L	1.10 mg/L	☒	SM4500	CTL PH0547
Total Cooper	Semi-annual	0.033 mg/L	0.059 mg/L	☐	EPA 200.7	CTL PH0547
Total Zinc	Semi-annual	0.184 mg/L	0.160 mg/L	☒	EPA 200.7	CTL PH0547
Total Lead	Semi-annual	<0.03 mg/L	0.076 mg/L	☐	EPA 200.7	CTL PH0547
24 Hr. LC_{50}	Annual-Year 1&2	>100%	n/a		EPA-821-R-02-012	NEB
48 Hr. LC_{50}	Annual-Year 1&2	>100%	n/a		EPA-821-R-02-012	NEB

*** See Additional Sector G Monitoring Section on page 3 of this form for Federal or Municipal facilities with incidental solid deicing material storage only.**

Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: see note below
None

NOTE: Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this form.

STORMWATER ACUTE TOXICITY TEST DATA SHEET

(required annually only during Year 1 and Year 2 of the permit)

Site Name: **Oxford PWG / CTL Sample No. 14712**	
Date/Time Begin: **10/27/2011 / 1335**	Date/Time End: **10/29/2011 @12:35**
Sample Hardness: **46 mg/L**	Sample Conductivity: **1254**
Test Species: *Daphnia pulex* < 24 hrs old	Dilution Water Hardness: **48 mg/L**

Effluent Dilution	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			PH (su)		
Hour	00	24	48	00	24	48	00	24	48	00	24	48
CONTROL 1	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
CONTROL 2	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
CONTROL 3	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
CONTROL 4	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
6.25% A	5	5	5	8.7	9.2	9.0	19	19	19	7.0	6.8	7.3
6.25% B	5	5	5	8.7	9.2	9.0	19	19	19	7.0	6.8	7.3
6.25% C	5	5	5	8.7	9.2	9.0	19	19	19	7.0	6.8	7.3
6.25% D	5	5	5	8.7	9.2	9.0	19	19	19	7.0	6.8	7.3
12.5% A	5	5	5	8.8	9.2	8.9	19	19	19	7.0	6.9	7.3
12.5% B	4	4	4	8.8	9.2	8.9	19	19	19	7.0	6.9	7.3
12.5% C	5	5	5	8.8	9.2	8.9	19	19	19	7.0	6.9	7.3
12.5% D	5	5	5	8.8	9.2	8.9	19	19	19	7.0	6.9	7.3
25% A	5	5	5	8.9	8.9	9.0	19	19	19	7.0	6.9	7.3
25% B	5	5	5	8.9	8.9	9.0	19	19	19	7.0	6.9	7.3
25% C	5	5	5	8.9	8.9	9.0	19	19	19	7.0	6.9	7.3
25% D	5	5	5	8.9	8.9	9.0	19	19	19	7.0	6.9	7.3
50% A	5	5	5	8.9	8.3	8.8	19	19	19	7.0	7.0	7.2
50% B	5	5	5	8.9	8.3	8.8	19	19	19	7.0	7.0	7.2
50% C	5	5	5	8.9	8.3	8.8	19	19	19	7.0	7.0	7.2
50% D	5	5	5	8.9	8.3	8.8	19	19	19	7.0	7.0	7.2
100% A	5	5	5	9.0	7.0	8.1	19	19	19	6.9	6.9	7.1
100% B	5	5	5	9.0	7.0	8.1	19	19	19	6.9	6.9	7.1
100% C	5	5	5	9.0	7.0	8.1	19	19	19	6.9	6.9	7.1
100% D	5	5	5	9.0	7.0	8.1	19	19	19	6.9	6.9	7.1

REFERENCE TOXICANT RESULTS

Test Species	Date	Reference Toxicant	Source	LC_{50}
Daphnia pulex	10/15/11	Cu NO3 10-1103-024	NEB	2.201 ug/L

Additional Monitoring: Sector G

For Federal or Municipal facilities with incidental solid deicing material storage only:

Parameter	Required Frequency	Results (units)	Benchmark	Test Method	Laboratory Name
Chloride	Semi-annual Years 1&2 only	350 mg/L	n/a	SM4500-Cl E	CTL PH0547
Cyanide	Semi-annual Years 1&2 only	<0.05mg/L	n/a	EPA 335.4	CTL PH0547

Additional Monitoring for Discharges to Impaired Waters (if applicable):

Parameter	Frequency	Results (units)	Test Method	Laboratory Name
NA				

Statement of Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Permittee	12/13/11 Date
George R. Temple Name of Permittee (print or type)	**First Seclectman** Title (if applicable)
Lawrence K. Secor Signature of Preparer (if different than above)	**12/12/2011** Date
Lawrence K. Secor Name of Preparer (print or type)	**Sr. Env. Proj. Mgr.** Title (if applicable)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR
BUREAU OF WATER PROTECTION AND LAND REUSE
CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011
Data Tracking Sheet
Sector G-Municipal or Federal Facilities

Permittee Name: **Town of Oxford** Permit #: GSI **001215**
Site Name: **Oxford PWG / CTL Sample No. 14712**
Site Address: **21 Great Oak Rd.,Oxford, CT 06478**
Sample Location: **DSN-02**

Enter the sample dates and the data reported for the 4 most recent semi-annual sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4.

Average = $\frac{(\text{Sample 1} + \text{Sample 2} + \text{Sample 3} + \text{Sample 4})}{4}$

	Sample Result						
Parameter	1	2	3	4	Average	Benchmark*	Qualify for exemption?
Sample Date	10/27/11						
O&G	2.6					5.0 mg/L	
Sample pH	6.5					5-9 S.U.	
COD	123					75 mg/L	
TSS	42					90 mg/L	
TP	0.37					0.40 mg/L	
TKN	3.28					2.30 mg/L	
NO_3-N	2.1					1.10 mg/L	
Total Copper	0.033					0.059 mg/L	
Total Zinc	0.184					0.160 mg/L	
Total Lead	<0.030					0.076 mg/L	

*If the average of the 4 most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually for that parameter for the rest of the permit (current permit expires 9/30/2016). If your facility qualifies for an exemption from monitoring for sample pH, your facility is also exempt from monitoring rainfall pH for the remainder of the permit.

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1.If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(1)(B) of the General permit for requirements when exceeding a benchmark.

If the sample results reported by the testing laboratory were below detection limit, for the purpose of averaging, use a value that is ½ the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to section 5 e(1)B(iii) for a more detailed explanation.

General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011
Stormwater Monitoring Report Form
Sector G - Municipal or Federal Facilities

Facility Information

Permittee Name: Town of Oxford Site Name: Oxford PWG/CTL Sample No. 14713
Mailing Address: 21 Great Oak Rd., Oxford, CT 06478
Contact Person: Wayne Watt Title: Road Foreman
Business Phone: 203.888.7716 ext.: ____ Email: wayne.watt@oxfordpublicworks.com
Site Address: 21 Great oak Rd. Oxford, CT 06478
Receiving Water (name/basin): Eight mile Brook /6023-09-1
Permit #: GSI 001215 Primary SIC: 9199
Discharges into an Impaired Waterbody: Yes ☒ No ☐ (If yes, complete the table on page 3 of this form)

Sample Information

Sample Location: 41.42673N, -73.14443W (PWG) DSN-O3 Person Collecting Sample: Larry Secor
Date/Time Collected: 10/27/11 / 07:50 AM Date of Previous Storm Event: 10/20/2011
This report is for samples required: Semi-annually ☒ Annually ☐ Other ☐
Check here if the sample contains **snow or ice melt**: ☐
Check here if a benchmark exceedance is solely due to background or off site sources ☐ see note below

Monitoring Results

Parameter	Required Frequency	Results (units)	Benchmark	Benchmark Exceedance (see pg 4)	Test Method	Laboratory Name
Oil & Grease	Semi-annual	2.4 mg/L	5.0 mg/L	☐	EPA 1664A	CTLPH0547
Rainfall pH	Semi-annual	4.73	n/a		CP 20	
Sample pH	Semi-annual	7.0	5-9 SU	☐	SM 4500H/B	CTL PH0547
COD	Semi-annual	43 mg/L	75 mg/L	☐	EPA 410.4	CTL PH0547
TSS	Semi-annual	21 mg/L	90 mg/L	☐	SM 2540D	CTL PH0547
TP	Semi-annual	0.09 mg/L	0.40 mg/L	☐	EPA 365.3	CTL PH0547
TKN	Semi-annual	2.11 mg/L	2.30 mg/L	☐	EPA 351.2	CTL PH0547
NO_3-N	Semi-annual	1.9 mg/L	1.10 mg/L	☒	SM4500	CTL PH0547
Total Cooper	Semi-annual	<0.01 mg/L	0.059 mg/L	☐	EPA 200.7	CTL PH0547
Total Zinc	Semi-annual	2.00 mg/L	0.160 mg/L	☐	EPA 200.7	CTL PH0547
Total Lead	Semi-annual	0.048 mg/L	0.076 mg/L	☐	EPA 200.7	CTL PH0547
24 Hr. LC_{50}	Annual-Year 1&2	>100%	n/a		EPA-821-R-02-012	NEB
48 Hr. LC_{50}	Annual-Year 1&2	27.8%	n/a		EPA-821-R-02-012	NEB

*** See Additional Sector G Monitoring Section on page 3 of this form for Federal or Municipal facilities with incidental solid deicing material storage only.**

Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: see note below
None

NOTE: Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this form.

STORMWATER ACUTE TOXICITY TEST DATA SHEET

(required annually only during Year 1 and Year 2 of the permit)

Site Name: **Oxford PWG / CTL Sample No. 14713**	
Date/Time Begin: **10/27/2011 / 1335**	Date/Time End: **10/29/2011 @12:35**
Sample Hardness: **46 mg/L**	Sample Conductivity: **1254**
Test Species: *Daphnia pulex* < 24 hrs old	Dilution Water Hardness: **48 mg/L**

Effluent Dilution	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			PH (su)		
Hour	00	24	48	00	24	48	00	24	48	00	24	48
CONTROL 1	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
CONTROL 2	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
CONTROL 3	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
CONTROL 4	5	5	5	8.5	8.9	8.9	20	19	19	7.6	7.2	7.2
6.25% A	5	5	5	8.7	9.2	9.0	19	19	19	7.3	6.7	7.2
6.25% B	5	5	5	8.7	9.2	9.0	19	19	19	7.3	6.7	7.2
6.25% C	5	5	5	8.7	9.2	9.0	19	19	19	7.3	6.7	7.2
6.25% D	5	5	5	8.7	9.2	9.0	19	19	19	7.3	6.7	7.2
12.5% A	5	5	5	8.7	9.3	9.2	19	19	19	7.3	6.8	7.2
12.5% B	5	4	4	8.7	9.3	9.2	19	19	19	7.3	6.8	7.2
12.5% C	5	5	5	8.7	9.3	9.2	19	19	19	7.3	6.8	7.2
12.5% D	5	5	5	8.7	9.3	9.2	19	19	19	7.3	6.8	7.2
25% A	5	4	1	8.8	9.3	9.1	19	19	19	7.3	6.8	7.2
25% B	5	3	1	8.8	9.3	9.1	19	19	19	7.3	6.8	7.2
25% C	5	5	3	8.8	9.3	9.1	19	19	19	7.3	6.8	7.2
25% D	5	5	2	8.8	9.3	9.1	19	19	19	7.3	6.8	7.2
50% A	5	5	1	8.9	9.3	9.2	19	19	19	7.3	6.9	7.2
50% B	5	4	0	8.9	9.3	9.2	19	19	19	7.3	6.9	7.2
50% C	5	4	1	8.9	9.3	9.2	19	19	19	7.3	6.9	7.2
50% D	5	5	2	8.9	9.3	9.2	19	19	19	7.3	6.9	7.2
100% A	5	5	1	8.9	9.3	9.2	19	19	19	7.3	6.9	7.0
100% B	5	2	0	8.9	9.3	9.2	19	19	19	7.3	6.9	7.0
100% C	5	5	1	8.9	9.3	9.2	19	19	19	7.3	6.9	7.0
100% D	5	5	1	8.9	9.3	9.2	19	19	19	7.3	6.9	7.0

REFERENCE TOXICANT RESULTS

Test Species	Date	Reference Toxicant	Source	LC_{50}
Daphnia pulex	10/15/11	Cu NO3 10-1103-024	NEB	2.201 ug/L

Additional Monitoring: Sector G

For Federal or Municipal facilities with incidental solid deicing material storage only:

Parameter	Required Frequency	Results (units)	Benchmark	Test Method	Laboratory Name
Chloride	Semi-annual Years 1&2 only	707 mg/L	n/a	SM4500-Cl E	CTL PH0547
Cyanide	Semi-annual Years 1&2 only	ND<0.05mg/L	n/a	EPA 335.4	CTL PH0547

Additional Monitoring for Discharges to Impaired Waters (if applicable):

Parameter	Frequency	Results (units)	Test Method	Laboratory Name
NA				

Statement of Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Permittee — Date 12/13/11

George R. Temple — Name of Permittee (print or type)

First Seclectman — Title (if applicable)

Lawrence K. Secor — Signature of Preparer (if different than above)

12/12/2011 — Date

Lawrence K. Secor — Name of Preparer (print or type)

Sr. Env. Proj. Mgr. — Title (if applicable)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR
BUREAU OF WATER PROTECTION AND LAND REUSE
CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011
Data Tracking Sheet
Sector G-Municipal or Federal Facilities

Permittee Name: **Town of Oxford** Permit #: GSI **001215**
Site Name: **Oxford PWG / CTL Sample No. 14713**
Site Address: **21 Great Oak Rd.,Oxford, CT 06478**
Sample Location: **DSN-03**

Enter the sample dates and the data reported for the 4 most recent semi-annual sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4.

Average = $\frac{\text{(Sample 1+ Sample 2 + Sample 3 + Sample 4)}}{4}$

	Sample Result						
Parameter	1	2	3	4	Average	Benchmark*	Qualify for exemption?
Sample Date	10/27/11						
O&G	2.4					5.0 mg/L	
Sample pH	7.0					5-9 S.U.	
COD	43					75 mg/L	
TSS	21					90 mg/L	
TP	0.09					0.40 mg/L	
TKN	2.11					2.30 mg/L	
NO_3-N	1.9					1.10 mg/L	
Total Copper	<0.01					0.059 mg/L	
Total Zinc	2.00					0.160 mg/L	
Total Lead	0.048					0.076 mg/L	

*If the average of the 4 most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually for that parameter for the rest of the permit (current permit expires 9/30/2016). If your facility qualifies for an exemption from monitoring for sample pH, your facility is also exempt from monitoring rainfall pH for the remainder of the permit.

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1.If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(**1**)(B) of the General permit for requirements when exceeding a benchmark.

If the sample results reported by the testing laboratory were below detection limit, for the purpose of averaging, use a value that is ½ the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to section 5 e(**1**)B(iii) for a more detailed explanation.

APPENDIX II

STORMWATER BMPS, OUTREACH, and FORM EXAMPLES

Make your home

The SOLUTION TO STORMWATER POLLUTION!

A homeowner's guide to healthy habits for clean water

EPA United States Environmental Protection Agency

As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt, and other pollutants. Stormwater can flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water. Polluted runoff is the nation's greatest threat to clean water.

By practicing healthy household habits, homeowners can keep common pollutants like pesticides, pet waste, grass clippings, and automotive fluids off the ground and out of stormwater. Adopt these healthy household habits and help protect lakes, streams, rivers, wetlands, and coastal waters. Remember to share the habits with your neighbors!

Healthy Household Habits for Clean Water

Vehicle and Garage

- Use a commercial car wash or wash your car on a lawn or other unpaved surface to **minimize** the amount of dirty, soapy water flowing into the storm drain and eventually into your local waterbody.

- Check your car, boat, motorcycle, and other machinery and equipment for **leaks and spills**. Make repairs as soon as possible. Clean up **spilled fluids** with an absorbent material like kitty litter or **sand**, and don't rinse the spills into a nearby storm drain. Remember to properly dispose of the absorbent material.
- **Recycle** used oil and other automotive fluids at participating service stations. Don't dump these chemicals down the storm drain or dispose of them in your trash.

Lawn and Garden

- Use pesticides and fertilizers **sparingly**. When use is necessary, use these chemicals in the recommended amounts. Avoid application if the forecast calls for rain; otherwise, chemicals will be washed into your local stream.
- Select **native** plants and grasses that are drought- and pest-resistant. Native plants require less water, fertilizer, and pesticides.
- **Sweep up** yard debris, rather than hosing down areas. Compost or recycle yard waste when possible.
- Don't overwater your lawn. Water during the **cool** times of the day, and don't let water run off into the storm drain.
- Cover piles of dirt and mulch being used in landscaping projects to prevent these pollutants from blowing or washing off your yard and into local waterbodies. **Vegetate** bare spots in your yard to prevent soil erosion.

Home Repair and Improvement

- Before beginning an outdoor project, locate the nearest storm drains and **protect** them from debris and other materials.
- **Sweep up** and properly dispose **of construction** debris such as concrete and mortar.
- Use hazardous substances like paints, solvents, and cleaners in the **smallest amounts possible**, and follow the directions on the label. Clean up spills **immediately**, and dispose of the waste safely. Store substances properly to avoid leaks and spills.
- Purchase and use **nontoxic, biodegradable, recycled,** and **recyclable** products whenever possible.
- **Clean** paint brushes in a sink, not outdoors. Filter and reuse **paint thinner** when using oil-based paints. Properly dispose of excess paints through a household hazardous waste collection program, or donate unused paint to local organizations.
- **Reduce** the amount of paved area and increase the amount of vegetated area in your yard. Use native plants in your landscaping to reduce the need for watering during dry periods. Consider directing downspouts away from paved surfaces onto lawns and other measures to increase infiltration and reduce polluted runoff.

Pet Care

- When walking your pet, remember to **pick up** the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.

Swimming Pool and Spa

- **Drain** your swimming pool only when a test kit does not detect chlorine levels.
- Whenever possible, drain your pool or spa into the **sanitary** sewer system.
- Properly store pool and spa chemicals to **prevent** leaks and spills, preferably in a covered area to avoid exposure to stormwater.

Septic System Use and Maintenance

- Have your septic system **inspected** by a professional at least every 3 years, and have the septic tank **pumped** as necessary (usually every 3 to 5 years).
- Care for the septic system drainfield by **not** driving or parking vehicles on it. Plant only grass over and near the drainfield to avoid damage from roots.
- Flush responsibly. Flushing household chemicals like paint, pesticides, oil, and antifreeze can **destroy** the biological treatment taking place in the system. Other items, such as diapers, paper towels, and cat litter, can **clog** the septic system and potentially damage components.

Storm drains connect to waterbodies!

WHEN IT RAINS
IT DRAINS

Remember: Only rain down the drain!

For more information, visit
www.epa.gov/npdes/stormwater
or
www.epa.gov/nps

EPA United States Environmental Protection Agency

EPA 833-B-03-003

January 2003

THE YEAR OF CLEAN WATER

Celebration & Recommitment

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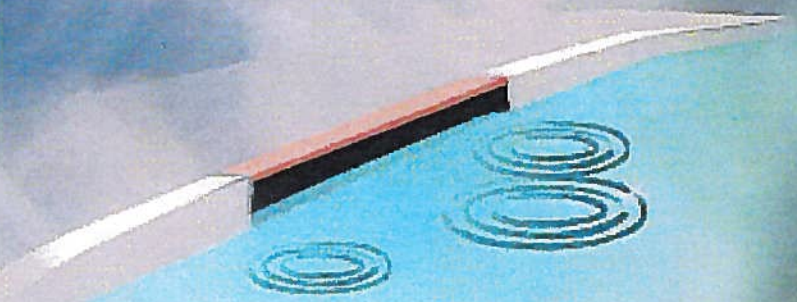
THE YEAR OF CLEAN WATER

Celebration & Recommitment

After the Storm



A Citizen's Guide to Understanding Stormwater

WHEN IT RAINS IT DRAINS

What is stormwater runoff?

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

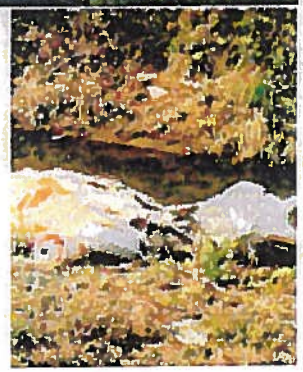
Why is stormwater runoff a problem?

Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

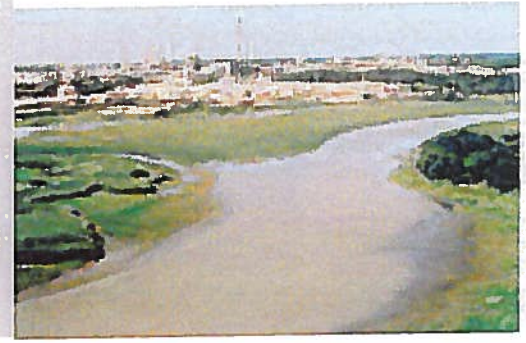
The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.



- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.



Stormwater Pollution Solutions

Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.

Residential

Recycle or properly dispose of household products that contain chemicals, such as insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids. Don't pour them onto the ground or into storm drains.

Auto care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

Lawn care

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains or streams.
- Cover piles of dirt or mulch being used in landscaping projects.

Septic systems

Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).
- Don't dispose of household hazardous waste in sinks or toilets.

Pet waste

Pet waste can be a major source of bacteria and excess nutrients in local waters.

- When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.

Residential landscaping

Permeable Pavement—Traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

Rain Barrels—You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.

Rain Gardens and Grassy Swales—Specially designed areas planted with native plants can provide natural places for rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.

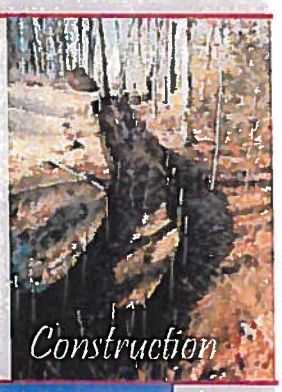
Vegetated Filter Strips—Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants stormwater picks up as it flows across driveways and streets.

Commercial

Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team. They'll know the best way to keep spills from harming the environment.

Construction



Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.

Agriculture

Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

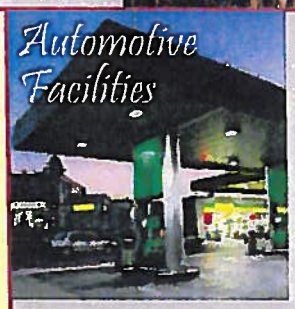
- Keep livestock away from streambanks and provide them a water source away from waterbodies.
- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.

Forestry

Improperly managed logging operations can result in erosion and sedimentation.

- Conduct preharvest planning to prevent erosion and lower costs.
- Use logging methods and equipment that minimize soil disturbance.
- Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor.
- Construct stream crossings so that they minimize erosion and physical changes to streams.
- Expedite revegetation of cleared areas.

Automotive Facilities



Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- Clean up spills immediately and properly dispose of cleanup materials.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- Install and maintain oil/water separators.