

2016 MS4 GENERAL PERMIT ANNUAL REPORT

TOWN OF TOLLAND

21 TOLLAND GREEN
TOLLAND, CONNECTICUT

DECEMBER 2016

PREPARED FOR:

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
ATTENTION: MR. CHRISTOPHER STONE, P.E.
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
79 ELM STREET
HARTFORD, CT 06106-5127

PREPARED BY:

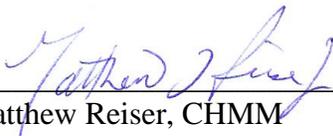
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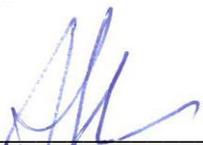
SIGNATURE OF REPORT AUTHORS

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



Matthew Reiser, CHMM
Compliance Specialist

12/29/16
Date



Gerald M. Clark
Principal

12/29/16
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 Tolland 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 Tolland registration number GSM000100. The second part was completion of a Stormwater Management Plan (SWMP). The Town most recently updated its SWMP in December 2013. The SWMP addresses how the Town of Tolland 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 Tolland located at 21 Tolland Green, Tolland, CT 06084. 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

Town Manager: Steve Werbner
Address: 21 Tolland Green
Tolland, CT 06084

Phone: 860-871-3600
Fax: 860-871-3663
E-mail: swerbner@tolland.org

Primary Contact: Scott C. Lappen, Director of Public Works
21 Tolland Green
Tolland, CT 06084

Phone: 860-871-3696
Fax: 860-871-7249
E-mail: slappen@tolland.org

2.0 MINIMUM CONTROL MEASURES & BEST MANAGEMENT PRACTICES

2.1 PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

- **Initiative:** Public Hearings and Participation - Develop Low Impact Development Stormwater Treatment Systems, Performance Requirements and Road Design Stormwater Management.
Responsible party: Town Planning & Community Development
Timeline: Complete with updates as needed.
Completion to date: Complete and posted on the Town website.
Future plans: Update plan as necessary.
- **Initiative:** Public Awareness – E-Blast (Tolland’s Electronic Alert System) Notifying Recipients Not to Discharge Oil or Hazardous Materials to Catch Basins (Stormwater and Water Quality).
Responsible party: Department of Public Works
Timeline: Ongoing.
Completion to date: Completed annually in December.
Future plans: Resend/republish annually or more frequently, as needed.
- **Initiative:** Public Awareness – Town’s Facebook Page Posting Notifying Viewers Not to Discharge Oil or Hazardous Materials to Catch Basins (Stormwater and Water Quality).
Responsible party: Department of Public Works
Timeline: Completed 2015
Completion to date: Complete
Future plans: Republish annually or more frequently, as needed.
- **Initiative:** Public Awareness – Created a Stormwater Information Bulletin Board located in the Town Hall. Postings include relevant information and facts regarding stormwater quality and preventative measures that homeowners and business could implement to protect and preserve water quality.
Responsible party: Department of Public Works
Timeline: Completed 2015
Completion to date: Complete
Future plans: Update the bulletin board with new and relevant information and ensure that existing posts are in good condition.

2.2 PUBLIC INVOLVEMENT/PARTICIPATION

- **Initiative:** Public Notification – Stormwater Catch Basin Construction Repair & Road Infrastructure Improvements.
Responsible party: Inland Wetland Commission, Public Works & Town Council
Timeline: Completed 2015
Completion to date: Complete
Future plans: Future notification and meetings to be completed on an as-needed basis.

- **Initiative:** Town “Clean Up” of Trash & Debris.
Responsible party: Conservation Commission, Tolland Residents and Public Works
Timeline: Ongoing
Completion to date: Completed annually.
Future plans: Future events are not planned at this time, but are anticipated.

2.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION – THROUGHOUT MUNICIPALITY

- **Initiative:** Inform public employees, businesses and the public of hazards associated with illegal discharges and improper waste disposal through Town-Wide Alert System and Town Facebook Posting.
Responsible party: Department of Public Works
Timeline: Ongoing
Completion to date: Completed annually in December.
Future plans: Resend and/or repost annually.
- **Initiative:** Map all outfalls and stormwater discharge pipes.
Responsible party: Department of Public Works
Timeline: Ongoing
Completion to date: 100% complete
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.

2.4 ILLICIT DISCHARGE DETECTION AND ELIMINATION – URBANIZED AREAS

- **Initiative:** Map all outfalls and stormwater discharge pipes.
Responsible party: Department of Public Works
Timeline: Ongoing
Completion to date: 100% complete
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:** Develop, implement and enforce a program to detect and eliminate existing illicit discharges.
Responsible party: Public Works and Planning & Zoning Commission
Timeline: Complete
Completion to date: Complete. Investigation in 2009 by the Town of potential illicit discharge by Soldream. Town representatives discovered a questionable discharge apparently originating from Soldream facility. CT DEP was notified and they conducted follow-up actions.
Future plans: Town intends update this program on an as-needed basis.
- **Initiative:** Develop and implement a plan to detect and address future non-stormwater discharges, including illegal dumping to the MS4.
Responsible party: Department of Public Works
Timeline: Ongoing
Completion to date: 2015 – Town discovered illicit dumping of brush and landscape debris at the Gauges Brook. Town was unable to identify the source. Town DPW crews

removed all observed debris. Additionally, the Town continuously monitors and removes trash and debris, including appliances, furniture, and other solid waste dumped throughout the Town. 2016 – No reports of illicit discharges.

Future plans: Town intends to continue monitoring for non-stormwater discharges and illegal dumping.

2.5 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- **Initiative:** Develop 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 & Zoning Commission
Timeline: Ongoing
Completion to date: Town regulations exist that includes E&S control for construction sites. In 2016, the Town inspected a solar array project, smaller projects subject to wetlands permitting, a large residential development and houses awaiting Certificates of Occupancy for compliance with E&S control measures.
Future plans: Town intends to monitor and enforce applicable construction site stormwater runoff control. Town now requires pre-construction inspections of E&S control measures for construction projects, and will not sign off on a Certificate of Occupancy until the site is stabilized or contained with proper E&S measures.
- **Initiative:** Issuance of a wetlands permit and a special permit/site plan approval for construction of an apartment complex.
Responsible party: Wetlands Enforcement Officer & Zoning Enforcement Officer
Timeline: Complete
Completion to date: Permit was issued in 2015. Additional activities pending initiation of the project.
Future plans: Town intends to monitor and enforce applicable construction site stormwater runoff control.

2.6 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

- **Initiative:** Develop, implement and enforce a program to address stormwater runoff from qualifying new development and redevelopment that discharge into the MS4 or directly to waters of the State
Responsible party: Planning & Zoning Commission
Timeline: Complete
Completion to date: Town regulations exist that includes erosion and sediment control for construction sites. In 2016, the Town issued a stop-work order for a property in a business park due to the landowner clearing a steep slope which resulted in dirt washing into the street; the landowner stabilized the bank and no issues remain. The Town required a property owner which had an open wetlands permit to reinforce silt fencing when previously-installed measures failed. There were several other properties in which landowners conducted activities without permits in the wetlands upland review area; the Town worked with the property owners to stabilize the sites.
Future plans: Town intends to monitor and enforce applicable construction stormwater management in new development and redevelopment projects.

2.7 PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

- **Initiative:** Develop and implement a program with the goal of preventing or reducing pollutant runoff from municipal operations.

Responsible party: Department of Public Works

Timeline: On-going as needed

Completion to date: The following activities were completed in 2016, and are typically completed annually:

1. Public Works crews provided support to Town Conservation Commission and volunteers with collection of debris, including tires, metal and general trash from areas within Town;
2. Cleaned/inspected 40 catch basins;
3. Swept approximately 20 miles of Town streets;
4. Mowed 9 road-side retention basins;
5. Maintained 1 drainage swale in Campbell Conservation Area per wetlands order;
6. Ongoing collection of household hazardous waste and electronics recycling;
7. Stormwater monitoring at Town Highway Garage;
8. Provided stormwater and spill prevention & response training to applicable Town employees and fuel system operators for the Town-contracted school bus company (they use the Town-owned fuel dispensing system); and
9. Maintained a stormwater information bulletin board located at the Town Hall. Postings include relevant information and facts regarding stormwater quality and preventative measures that homeowners could implement to protect and preserve water quality.

Future plans: The Town plans to complete the following for 2017:

1. The Town plans to continue inventorying catch basins and stormwater outfalls;
2. The Town plans to continue publishing and distributing stormwater related updates and postings using its Town-wide alert system, Facebook page, website and bulletin board;
3. The Town will continue presenting and discussing stormwater on an as-needed basis at scheduled inland wetland commission meetings;
4. Town DPW crews will continue town-wide inspections and debris collection;
5. Continue to provide annual stormwater and spill response & prevention training to applicable Town and school bus employees; and
6. Continue routine stormwater sampling and inspection program at the Town Highway Garage as required by the CT DEEP Industrial Stormwater General Permit.

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.

APPENDIX A

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: Tolland

Mailing Address: 21 Tolland Green, Tolland, CT 06084

Contact Person: Scott Lappen Title: Director of Public Works

Phone: 860-871-3690 Permit Registration #GSM: 000100

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): 41.875962, -72.365406 / #1

Please check the appropriate area description: Industrial Commercial Residential

Receiving Water (name, basin): Clough Brook, Skungamaug River Basin

Time of Start of Discharge: unknown

Date/Time Collected: September 30, 2016 / 3:50 pm Water Temperature: 13.8° C

Person Collecting Sample: J. Clark, CMG Environmental, Inc.

Storm Magnitude (inches): 0.22 Storm Duration (hours): 8.75

Date of Previous Storm Event: September 27, 2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM4500-H B-00	6.55 SU	Phoenix Environmental Laboratories, Inc.
Rain pH	4500-H-B/9040	6.49 SU	Phoenix Environmental Laboratories, Inc.
Hardness	E200.7	55.7 mg/L CaCO ₃	Phoenix Environmental Laboratories, Inc.
Conductivity	SM2510B-97	189 umhos/cm	Phoenix Environmental Laboratories, Inc.
Oil & Grease	E1664A	1.4 mg/L	Phoenix Environmental Laboratories, Inc.
COD	SM5220D-97	18 mg/L	Phoenix Environmental Laboratories, Inc.
Turbidity	SM2130B-01	2.64 NTU	Phoenix Environmental Laboratories, Inc.
TSS	SM2540D-97	<5.0 mg/L	Phoenix Environmental Laboratories, Inc.
TP	SM4500PE-99	0.103 mg/L	Phoenix Environmental Laboratories, Inc.
Ammonia	E350.1	0.06 mg/L	Phoenix Environmental Laboratories, Inc.
TKN	E351.1	0.50 mg/L	Phoenix Environmental Laboratories, Inc.
NO ₃ +NO ₂	E353.2	0.67 mg/L	Phoenix Environmental Laboratories, Inc.
E. coli	SM9223B-04	537 MPN/100mls	Phoenix Environmental 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: Scott Lappen, Director of Public Works

Signature:  Date: 12-29-16



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

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 79 ELM STREET
 HARTFORD, CT 06106-5127

PERMITTEE INFORMATION

Town: Tolland

Mailing Address: 21 Tolland Green, Tolland, CT 06084

Contact Person: Scott Lappen Title: Director of Public Works

Phone: 860-871-3690 Permit Registration #GSM: 000100

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): 41.852503,-72.343047 / #2

Please check the appropriate area description: Industrial Commercial Residential

Receiving Water (name, basin): Unnamed Brook, Skungamaug River Basin

Time of Start of Discharge: unknown

Date/Time Collected: September 30, 2016 / 4:22 pm Water Temperature: 16.1° C

Person Collecting Sample: J. Clark, CMG Environmental, Inc.

Storm Magnitude (inches): 0.22 Storm Duration (hours): 8.75

Date of Previous Storm Event: September 27, 2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM4500-H B-00	5.93 SU	Phoenix Environmental Laboratories, Inc.
Rain pH	4500-H-B/9040	6.56 SU	Phoenix Environmental Laboratories, Inc.
Hardness	E200.7	12.8 mg/L CaCO ₃	Phoenix Environmental Laboratories, Inc.
Conductivity	SM2510B-97	58 umhos/cm	Phoenix Environmental Laboratories, Inc.
Oil & Grease	E1664A	<1.4 mg/L	Phoenix Environmental Laboratories, Inc.
COD	SM5220D-97	89 mg/L	Phoenix Environmental Laboratories, Inc.
Turbidity	SM2130B-01	18.3 NTU	Phoenix Environmental Laboratories, Inc.
TSS	SM2540D-97	23 mg/L	Phoenix Environmental Laboratories, Inc.
TP	SM4500PE-99	0.206 mg/L	Phoenix Environmental Laboratories, Inc.
Ammonia	E350.1	0.11 mg/L	Phoenix Environmental Laboratories, Inc.
TKN	E351.1	0.26 mg/L	Phoenix Environmental Laboratories, Inc.
NO ₃ +NO ₂	E353.2	0.29 mg/L	Phoenix Environmental Laboratories, Inc.
E. coli	SM9223B-04	738 MPN/100mls	Phoenix Environmental 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: Scott Lappen, Director of Public Works
 (Print Name)

Signature: Date: 12-29-16



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PERMITTEE INFORMATION

Town: <u>Tolland</u>	
Mailing Address: <u>21 Tolland Green, Tolland, CT 06084</u>	
Contact Person: <u>Scott Lappen</u>	Title: <u>Director of Public Works</u>
Phone: <u>860-871-3690</u>	Permit Registration #GSM: <u>000100</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>41.842944,-72.369311 / #3</u>	
Please check the appropriate area description: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential	
Receiving Water (name, basin): <u>Unnamed Tributary to Metcalf Brook, Skungamaug River Basin</u>	
Time of Start of Discharge: <u>unknown</u>	
Date/Time Collected: <u>September 30, 2016 / 4:58 pm</u>	Water Temperature: <u>15.9° C</u>
Person Collecting Sample: <u>J. Clark, CMG Environmental, Inc.</u>	
Storm Magnitude (inches): <u>0.22</u>	Storm Duration (hours): <u>8.75</u>
Date of Previous Storm Event: <u>September 27, 2016</u>	

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM4500-H B-00	6.19 SU	Phoenix Environmental Laboratories, Inc.
Rain pH	4500-H-B/9040	6.32 SU	Phoenix Environmental Laboratories, Inc.
Hardness	E200.7	15.7 mg/L CaCO ₃	Phoenix Environmental Laboratories, Inc.
Conductivity	SM2510B-97	117 umhos/cm	Phoenix Environmental Laboratories, Inc.
Oil & Grease	E1664A	1.5 mg/L	Phoenix Environmental Laboratories, Inc.
COD	SM5220D-97	50 mg/L	Phoenix Environmental Laboratories, Inc.
Turbidity	SM2130B-01	8.70 NTU	Phoenix Environmental Laboratories, Inc.
TSS	SM2540D-97	<5.0 mg/L	Phoenix Environmental Laboratories, Inc.
TP	SM4500PE-99	0.204 mg/L	Phoenix Environmental Laboratories, Inc.
Ammonia	E350.1	0.11 mg/L	Phoenix Environmental Laboratories, Inc.
TKN	E351.1	0.79 mg/L	Phoenix Environmental Laboratories, Inc.
NO ₃ +NO ₂	E353.2	0.18 mg/L	Phoenix Environmental Laboratories, Inc.
E. coli	SM9223B-04	933 MPN/100mls	Phoenix Environmental 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: Scott Lappen, Director of Public Works
(Print Name)

Signature: Date: 12-29-16



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

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Mailing Address: <u>21 Tolland Green, Tolland, CT 06084</u>	
Contact Person: <u>Scott Lappen</u>	Title: <u>Director of Public Works</u>
Phone: <u>860-871-3690</u>	Permit Registration #GSM: <u>000100</u>

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>41.881681, -72.397856 / #4</u>	
Please check the appropriate area description: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential	
Receiving Water (name, basin): <u>Unnamed Tributary to West Brook, Hockanum River Basin</u>	
Time of Start of Discharge: <u>unknown</u>	
Date/Time Collected: <u>September 30, 2016 / 4:40 pm</u>	Water Temperature: <u>16.0° C</u>
Person Collecting Sample: <u>J. Clark, CMG Environmental, Inc.</u>	
Storm Magnitude (inches): <u>0.22</u>	Storm Duration (hours): <u>8.75</u>
Date of Previous Storm Event: <u>September 27, 2016</u>	

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM4500-H B-00	4.00 SU	Phoenix Environmental Laboratories, Inc.
Rain pH	4500-H-B/9040	6.46 SU	Phoenix Environmental Laboratories, Inc.
Hardness	E200.7	5.3 mg/L CaCO ₃	Phoenix Environmental Laboratories, Inc.
Conductivity	SM2510B-97	100 umhos/cm	Phoenix Environmental Laboratories, Inc.
Oil & Grease	E1664A	<1.4 mg/L	Phoenix Environmental Laboratories, Inc.
COD	SM5220D-97	23 mg/L	Phoenix Environmental Laboratories, Inc.
Turbidity	SM2130B-01	3.27 NTU	Phoenix Environmental Laboratories, Inc.
TSS	SM2540D-97	48 mg/L	Phoenix Environmental Laboratories, Inc.
TP	SM4500PE-99	0.100 mg/L	Phoenix Environmental Laboratories, Inc.
Ammonia	E350.1	0.47 mg/L	Phoenix Environmental Laboratories, Inc.
TKN	E351.1	2.20 mg/L	Phoenix Environmental Laboratories, Inc.
NO ₃ +NO ₂	E353.2	0.18 mg/L	Phoenix Environmental Laboratories, Inc.
E. coli	SM9223B-04	13,000 MPN/100mls	Phoenix Environmental 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: <u>Scott Lappen, Director of Public Works</u>	
Signature: <u></u>	Date: <u>12-29-16</u>



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PERMITTEE INFORMATION

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Mailing Address: <u>21 Tolland Green, Tolland, CT 06084</u>	
Contact Person: <u>Scott Lappen</u>	Title: <u>Director of Public Works</u>
Phone: <u>860-871-3690</u>	Permit Registration #GSM: <u>000100</u>

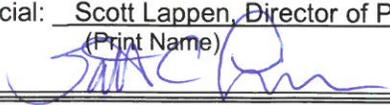
SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): <u>41.864963, -72.422455 / #5</u>	
Please check the appropriate area description: <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential	
Receiving Water (name, basin): <u>Gages Brook, Tankerhoosen River Basin</u>	
Time of Start of Discharge: <u>unknown</u>	
Date/Time Collected: <u>September 30, 2016 / 5:10 pm</u>	Water Temperature: <u>15.1° C</u>
Person Collecting Sample: <u>J. Clark, CMG Environmental, Inc.</u>	
Storm Magnitude (inches): <u>0.22</u>	Storm Duration (hours): <u>8.75</u>
Date of Previous Storm Event: <u>September 27, 2016</u>	

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM4500-H B-00	6.52 SU	Phoenix Environmental Laboratories, Inc.
Rain pH	4500-H-B/9040	7.02 SU	Phoenix Environmental Laboratories, Inc.
Hardness	E200.7	12.5 mg/L CaCO ₃	Phoenix Environmental Laboratories, Inc.
Conductivity	SM2510B-97	41 umhos/cm	Phoenix Environmental Laboratories, Inc.
Oil & Grease	E1664A	<1.4 mg/L	Phoenix Environmental Laboratories, Inc.
COD	SM5220D-97	42 mg/L	Phoenix Environmental Laboratories, Inc.
Turbidity	SM2130B-01	5.16 NTU	Phoenix Environmental Laboratories, Inc.
TSS	SM2540D-97	27 mg/L	Phoenix Environmental Laboratories, Inc.
TP	SM4500PE-99	0.258 mg/L	Phoenix Environmental Laboratories, Inc.
Ammonia	E350.1	0.32 mg/L	Phoenix Environmental Laboratories, Inc.
TKN	E351.1	7.45 mg/L	Phoenix Environmental Laboratories, Inc.
NO ₃ +NO ₂	E353.2	0.84 mg/L	Phoenix Environmental Laboratories, Inc.
E. coli	SM9223B-04	>24,000 MPN/100mls	Phoenix Environmental 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: <u>Scott Lappen, Director of Public Works</u>	
Signature: 	Date: <u>12-29-16</u>



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: Tolland

Mailing Address: 21 Tolland Green, Tolland, CT 06084

Contact Person: Scott Lappen Title: Director of Public Works

Phone: 860-871-3690 Permit Registration #GSM: 000100

SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): 41,862149, -72,419754 / #6

Please check the appropriate area description: Industrial Commercial Residential

Receiving Water (name, basin): Gages Brook, Tankerhoosen River Basin

Time of Start of Discharge: unknown

Date/Time Collected: September 30, 2016 / 5:35 pm Water Temperature: 14.0° C

Person Collecting Sample: J. Clark, CMG Environmental, Inc.

Storm Magnitude (inches): 0.22 Storm Duration (hours): 8.75

Date of Previous Storm Event: September 27, 2016

MONITORING RESULTS

Parameter	Method	Results (units)	Laboratory
Sample pH	SM4500-H B-00	2.82 SU	Phoenix Environmental Laboratories, Inc.
Rain pH	4500-H-B/9040	6.60 SU	Phoenix Environmental Laboratories, Inc.
Hardness	E200.7	44.7 mg/L CaCO ₃	Phoenix Environmental Laboratories, Inc.
Conductivity	SM2510B-97	918 umhos/cm	Phoenix Environmental Laboratories, Inc.
Oil & Grease	E1664A	<1.4 mg/L	Phoenix Environmental Laboratories, Inc.
COD	SM5220D-97	<10 mg/L	Phoenix Environmental Laboratories, Inc.
Turbidity	SM2130B-01	0.75 NTU	Phoenix Environmental Laboratories, Inc.
TSS	SM2540D-97	<5.0 mg/L	Phoenix Environmental Laboratories, Inc.
TP	SM4500PE-99	0.036 mg/L	Phoenix Environmental Laboratories, Inc.
Ammonia	E350.1	<0.05 mg/L	Phoenix Environmental Laboratories, Inc.
TKN	E351.1	0.33 mg/L	Phoenix Environmental Laboratories, Inc.
NO ₃ +NO ₂	E353.2	0.99 mg/L	Phoenix Environmental Laboratories, Inc.
E. coli	SM9223B-04	5,790 MPN/100mls	Phoenix Environmental Laboratories, Inc.

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