

**MS4 General Permit**  
**Town of Bethel 2019 Annual Report**  
 Existing MS4 Permittee  
 Permit Number GSM 000096  
 [January 1, 2020 – December 31, 2020]

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This report documents the Town of Bethel’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2020 to December 31, 2020.

**Part I: Summary of Minimum Control Measure Activities**

**1. Public Education and Outreach (Section 6 (a)(1) / page 19)**

**1.1 BMP Summary**

| <b>BMP</b>   | <b>Status</b> | <b>Activities in current reporting period</b> (if needed, more space available after this table)  | <b>Measurable goal</b>   | <b>Department/ Person Responsible</b> | <b>Due</b> | <b>Date completed or projected completion date</b> | <b>Additional details</b>   |
|--|---------------|---|--|---------------------------------------|------------|--|---|
| 1-1 Implement public education and outreach                | Ongoing       | Develop and distribute handouts and publications. Materials available in the Municipal Center and given to builders and residents when taking out permits with the Building Department, Planning & Zoning and Public Works. Update Town website as necessary with materials/links | Educate the general public and increase their awareness regarding the effects of polluted stormwater – Update and maintain the Town’s website to include educational materials | Public Works                          | Ongoing    | Initially Completed December 31, 2017              | Links Available on Website:<br>- 2004 CT Stormwater Quality Manual<br>- CT NEMO MS4 Guide<br>- NPDES Stormwater Program<br>- Paint Recycling<br>- Car Washing<br>- River Smart CT<br>- HRRR Recycling Links |
| 1-2 Address education/ outreach for pollutants of concern* | Ongoing       | Target residents and businesses with appropriate informational materials. Posted education materials/links on the Town’s website addressing impaired waters and stormwater pollutants of concern. Update Town website as necessary with materials/links                           | Educate residents and business owners on potential stormwater impacts of improper waste disposal and illegal discharges  | Public Works                          | Ongoing    | Initially Completed December 31, 2017              |   |

**1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.**

Continue to have information available for interested students and residents in the Municipal Center. Implement a plan for annual Public Awareness Day where interested parties can visit DPW Garage and Transfer Station to learn about water education, recycling and stormwater. Due to Covid-19 sources were available on the town’s website and by request during the time the office and Municipal Center were closed to the public.

**1.3 Details of activities implemented to educate the community on stormwater**

| <b>Program Element/Activity</b>   | <b>Audience (and number of people reached)</b> | <b>Topic(s) covered</b>                                     | <b>Pollutant of Concern addressed (if applicable)</b> | <b>Responsible dept. or partner org.</b>                       |
|---|--|---|---|--|
| Brochures distributed at Town Hall & Town Meetings  | Developers, home owners (approx. 500)          | Impact of impervious cover, Septic systems & Fertilizer use | Bacteria, nitrogen and phosphorus                     | Public Works   |
| Household Hazardous Waste Collection Days<br>Collection Days (Spring & Fall) Information provided on Town’s Website | All Town Residents                             | Proper Disposal of Hazardous Waste                          | N/A   | Housatonic Resources Recovery Authority (HRRRA) / Public Works |
| Fall Leaf Pickup  | All Town Residents                             | Leaf Disposal Program                                       | Nutrients   | Public Works Department  |

## 2. Public Involvement/Participation (Section 6(a)(2) / page 21)

### 2.1 BMP Summary

| BMP   | Status            | Activities in current reporting period   | Measurable goal  | Department / Person Responsible  | Due          | Date completed or projected completion date | Additional details |
|---|-------------------|--|--|--|--------------|---|--------------------|
| 2-1 Final Stormwater Management Plan publically available     | Complete          | Draft of the Stormwater Management Plan (SMP) was made available to the public.  | Make a draft available on the town's website and have hard copies available in the DPW office.               | Public Works   | July 1, 2017 | July 1, 2017                                |                    |
|   | Complete          | Final SMP was made available to the public via website and hard copies.  | Make the final SMP available on the town's website and hard copies in Municipal Center.                      | Public Works   | Feb 15, 2018 | Feb 15, 2018                                |                    |
| 2-2 Comply with public notice requirements for Annual Reports | Complete /Ongoing | Public notice was posted via website and hard copies were made available in the DPW office. Make a draft and final of the 2019 Annual report. Publish on the town's website for Public comment and submit final to DEEP. | Completed and submitted the 2019 Annual Report. Make available via website and hardcopies in the DPW office. | Public Works   | Feb 15, 2020 | Feb 15, 2020                                |                    |
| 2-3 Establish stormwater committee                            | Ongoing           | Met to discuss any issues that have occurred in different departments regarding stormwater etc.  | Provide forum to coordinate SWMP implementation across depts. and commissions                                | Inland Wetlands, Public Works, Planning & Zoning and Building and Department | July 1, 2018 | July 1, 2018                                |                    |

### 2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Continue to hold stormwater committee meetings regularly to review SMP implementation progress.  
 Get ideas about how to implement the new information to the website and how to better public involvement.  
 Meet with West COG and HVA to see what resources are available to increase our public outreach.  
 Provide public notice of annual report.  
 Start recording meeting minutes and agendas for internal record.

### 2.3 Public Involvement/Participation reporting metrics

| Metrics  | Implemented | Date         | Posted   |
|--|-------------|--------------|--|
| Availability of the Stormwater Management Plan to public | Yes         | July 1, 2017 | Copies currently located in Public Works Department – Available on Town Website<br><a href="https://www.bethel-ct.gov/filestorage/1190/136/394/DEEP - MS4 - Stormwater Plan - Final - 2017.pdf">https://www.bethel-ct.gov/filestorage/1190/136/394/DEEP - MS4 - Stormwater Plan - Final - 2017.pdf</a>   |
| Availability of Annual Report announced to public        | Yes         | Feb 15, 2019 | Copies currently located in Public Works Department – Available on Town Website<br><a href="https://www.bethel-ct.gov/filestorage/1190/136/394/Annual Report 2019 - Open for Public Comment.pdf">https://www.bethel-ct.gov/filestorage/1190/136/394/Annual Report 2019 - Open for Public Comment.pdf</a> |

## 3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

### 3.1 BMP Summary

| BMP  | Status      | Activities in current reporting period  | Measurable goal                      | Department / Person Responsible                     | Due          | Date completed or projected completion date | Additional details   |
|--|-------------|---|--------------------------------------|---|--------------|---|--|
| 3-1 Develop written IDDE program   | In Progress | Written IDDE program was established using the CT IDDE program template. Met with HVA in December 2019 to help with the IDDE program. Working with HVA to develop better GIS mapping of outfalls. | Develop written plan of IDDE program | Public Works, Planning & Zoning and Inland Wetlands | July 1, 2018 | Anticipate completion by July 1, 2021.      | Working on continue the implementation of the plan - due to Covid-19 there were delays in this process |
| 3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas | In Progress | Working with West COG to create mapping in GIS format. Met with HVA in December 2019 to help with the IDDE program. Working with HVA to develop better GIS mapping of outfalls.                   | Develop map that shows the locations | Public Works  | July 1, 2019 | Anticipate completion by July 1, 2021       | Due to Covid-19 there were delays in this process  |

|  |             |   |  |  |               |  |  |
|--|-------------|---|--|--|---------------|--|--|
| 3-3 Implement citizen reporting program                      | Complete    | Developed phone reporting system to report resident and employee complaints and concerns.                     | Create excel formatted reporting to better see problem areas.  | Public Works   | Not Specified | July 1, 2017                                       | Recording of any/all calls regarding complaints and concerns about IDDE is Ongoing Status.     |
| 3-3 Implement citizen reporting program (Continued)          | In Progress | Develop a phone/GIS based reporting program to report resident and employee complaints and concerns.          | Develop and implement a GIS based reporting program to better see problem areas.   | Public Works   | Not Specified | Anticipate update will be complete by July 1, 2021 | We are changing the GIS reporting system to a new program that is better for asset management. |
| 3-4 Establish legal authority to prohibit illicit discharges | Complete    | Worked with commission to finalize proper procedure for reporting of illicit discharge to proper authorities. | Make sure that all parties are involved in any illicit discharge problems and make sure staff knows the proper procedure should a problem arise. | Public Works, Planning & Zoning and Inlands Wetlands | July 1, 2018  | July 1, 2019                                       |  |
|  | In Progress | Create Illicit Discharge Ordinance.   | Have an approved and finalized Ordinance regarding Illicit Discharge.  | Public Works, Planning & Zoning and Inlands Wetlands | Not Specified | July 1, 2021                                       |  |
| 3-5 Develop record keeping system for IDDE tracking          | Complete    | Currently we keep track of all IDDE via Excel and resident phone calls and complaints.                        | Track IDDE via phone and Excel. Implement GIS based reporting once developed.  | Public Works   | July 1, 2017  | July 1, 2017                                       | Converting the information to a new program that is better for asset mgmt.                     |
|  | In Progress | We looked into developing a GIS based reporting program to better see problem areas.                          | Develop GIS data system using asset management software.   | Public Works   | Not Specified | July 1, 2021                                       |  |
| 3-6 Address IDDE in areas with pollutants of concern         | In Progress | Continue to gather information and collect data and sampling in areas to better see where IDDE areas exist.   | When a specific area is determined we will map and access area to eliminate illicit discharge  | Public Works   | Not Specified | Anticipate completing by July 1, 2021              |  |
| 3-7 Consolidate IDDE tracking spreadsheets                   | In Progress | Compile all the IDDE tracking requirements into one spreadsheet.  | Have an entire log of problem areas and their pollutants   | Public Works   | Not Specified | Anticipate completing by July 1, 2022              |  |

**3.2 Describe any IDDE activities planned for the next year, if applicable.**

Implement the written IDDE program.  
 Begin/Create Illicit Discharge Ordinance.  
 Continue stormwater mapping of drainage, structures and piping network.  
 Continue to track IDDE through tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process.  
 The written program will be posted to the website; will update the written IDDE program as needed throughout the permit term.  
 Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process

**3.3 List of citizen reports of suspected illicit discharges received during this reporting period.**

| Date of Report    | Location / suspected source | Response taken |
|-------------------|-----------------------------|----------------|
| Nothing to Report |                             |                |
|                   |                             |                |
|                   |                             |                |

**3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.**

| Location<br>(Lat long/ street crossing /address and receiving water) | Date and duration of occurrence | Discharge to MS4 or surface water | Estimated volume discharged | Known or suspected cause / Responsible party | Corrective measures planned and completed (include dates) | Sampling data (if applicable) |
|--|---------------------------------|-----------------------------------|-----------------------------|--|---|-------------------------------|
| Nothing to Report  |                                 |                                   |                             |  |   |                               |
|  |                                 |                                   |                             |  |   |                               |

**3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.**

The Town of Bethel tracks the discharge to the source. We have not gotten any complaints from citizens or have been made aware of any major discharge. But we have a method in place of storm drain investigations, drainage investigations, on-site investigations and septic system investigations. We would track and report to DEEP and other parties. Public Works is responsible for investigating any reports received and tracking this information.

**3.6 Provide a summary of actions taken to address septic failures using the table below.**

| Location and nature of structure with failing septic systems | Actions taken to respond to and address the failures | Impacted water body or watershed, if known |
|--|--|--|
| No Septic Failures in 2020 Reported                          |  |  |
|  |  |  |

### 3.7 IDDE reporting metrics

| Metrics  |                               |
|--|-------------------------------|
| Estimated or actual number of MS4 outfalls                           | 36                            |
| Estimated or actual number of interconnections                       | Working on Field Verification |
| Outfall mapping complete   | ~10% from HVA Work            |
| Interconnection mapping complete                                     | N/A                           |
| System-wide mapping complete (detailed MS4 infrastructure)           | ~5-10%                        |
| Outfall assessment and priority ranking                              | N/A                           |
| Dry weather screening of all High and Low priority outfalls complete | 36                            |
| Catchment investigations complete                                    | ~5-10%                        |
| Estimated percentage of MS4 catchment area investigated              | ~5-10%                        |

### 3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

Handouts on IDDE are reviewed twice a year (March & November) with employees with training review.

Employees are expected to input any reports into the Excel tracking log by putting points on the map of problem areas.

Continue to work with West COG and community services to get as much information and knowledge of stormwater in our area to put into our GIS.

## 4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

### 4.1 BMP Summary

| BMP  | Status               | Activities in current reporting period  | Measurable goal  | Department / Person Responsible | Due           | Date completed or projected completion date | Additional details |
|--|----------------------|---|--|---------------------------------|---------------|---|--------------------|
| 4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit | Ongoing              | Incorporates LID regulations and BMP's in P & Z regulations                                 | Planning & Zoning will incorporate and expand LID regulations and BMPs in their regulations. | Planning & Zoning               | July 1, 2019  | July 1, 2019                                |                    |
| 4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval                               | Complete/<br>Ongoing | Updated existing paperwork<br>Continued tracking system                                     | Revise and update existing paperwork to promote a good tracking system of communication.     | Planning & Zoning               | July 1, 2017  | July 1, 2017                                |                    |
| 4-3 Review site plans for stormwater quality concerns  | Complete/<br>Ongoing | Reviewed site plans per DEEP regulations  | Engineer will continue to review site plans per DEEP regulations.                            | Engineering                     | July 1, 2017  | July 1, 2017                                |                    |
| 4-4 Conduct site inspections   | Complete/<br>Ongoing | Conducted site inspections per DEEP regulations   | Engineer will continue to conduct site inspections per DEEP regulations.                     | Engineering                     | July 1, 2017  | July 1, 2017                                |                    |
| 4-5 Implement procedure to allow public comment on site development  | Complete/<br>Ongoing | Continued to promote existing public comment.   | Promote existing public comment.   | Land Use                        | July 1, 2017  | July 1, 2017                                |                    |
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit                                       | Complete/<br>Ongoing | Handouts and documents given to developers and is now part of application process           | The Land Use Department will make this part of the site plan application.                    | Land Use                        | July 1, 2017  | July 1, 2017                                |                    |
| 4-7 Develop stormwater compliance checklist  | In Progress          | Developing checklist to provide developers on stormwater management compliance requirements | Standardize plan review  | Planning & Zoning               | Not Specified | Anticipate completing by July 1, 2021       |                    |



**4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.**

Integrate a stormwater compliance checklist into the review process once completed.  
 Begin the process of reviewing existing land use regulations to determine whether updates are required  
 Continue to review site plans and conduct construction site inspections.  
 Continue to document the number (per permit year) of construction plan submittals, construction startups, and construction inspections and report in the annual report.

**5. Post-construction Stormwater Management (Section 6(a)(5) / page 27)**

**5.1 BMP Summary**

| BMP  | Status      | Activities in current reporting period   | Measurable goal   | Department / Person Responsible | Due          | Date completed or projected completion date | Additional details                                  |
|--|-------------|--|---|---------------------------------|--------------|---|---|
| 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning | In Progress |  | To become more explicit through regulations and examples of good LID development.   | Land Use                        | July 1, 2021 | Anticipate completing by July 1, 2021       |   |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects                                   | In Progress | Engineer and P&Z and Inland & Wetlands worked together to try and eliminate noncompliance in post construction matters | Work with an Engineer to develop a plan of action for noncompliance. Review and update, as necessary, current regulations to identify, reduce, or eliminate existing regulatory barriers to implementation of LID and runoff reduction practices. | Land Use/ Engineering           | July 1, 2019 | Anticipate completing by July 1, 2021       |   |
| 5-3 Identify retention and detention ponds in priority areas   | In Progress | WestCOG and HVA is helping develop mapping process of all components of stormwater in Bethel                           | Have a list for tracking and be able to locate all retention and detention ponds in priority areas on GIS   | Public Works                    | July 1, 2019 | Anticipate completing by July 1, 2021       | Due to Covid-19 restrictions, the goal was not met. |

|   |             |  |   |              |               |                                       |   |
|---|-------------|--|---|--------------|---------------|---------------------------------------|---|
| 5-4 Implement long-term maintenance plan for stormwater basins and treatment structures | In Progress | Management staff is developing maintenance plan and working to get something budgeted                                  | Create and implement a long-term plan for basins and treatment structures. Update as necessary                    | Public Works | July 1, 2019  | Anticipate completing by July 1, 2021 | Due to Covid-19 restrictions, the goal was not met. |
| 5-5 DCIA mapping  | In Progress | WestCOG and Town of Bethel working to get mapping together by investigating sources of information to develop mapping. | Complete mapping with guidance from UConn CLEAR and WestCOG   | Public Works | July 1, 2020  | Anticipate completing by July 1, 2021 | Due to Covid-19 restrictions, the goal was not met. |
| 5-6 Address post-construction issues in areas with pollutants of concern                | In Progress |  | Engineer will give all information over to individual parties so proper departments can track findings to report. | Engineering  | Not Specified |                                       |   |

**5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.**

Review and update existing land use regulations and policies with the assistance of a consultant.

**5.3 Post-Construction Stormwater Management reporting metrics**

| Metrics   |   |
|---|---|
| Baseline (2012) Directly Connected Impervious Area (DCIA) | 822 Acres – Mildly Connected Model<br>3057 Acres – Highly Connected Model |
| DCIA disconnected (redevelopment plus retrofits)          | N/A   |
| Retrofits completed                                       | N/A   |
| DCIA disconnected   | N/A   |
| Estimated cost of retrofits                               | N/A   |
| Detention or retention ponds identified                   | N/A   |

**5.4 Briefly describe the method to be used to determine baseline DCIA.**

Working with DPW, P&Z, Inlands Wetlands, WestCOG, Uconn Clear and other Town of Bethel Departments we are working on finding the best method to identify baseline DCIA. DCIA is being estimated from high-resolution impervious cover and land use/cover data available from UConn NEMO relating DCIA and TIA.

**6. Pollution Prevention/Good Housekeeping (Section 6(a)(6) / page 31)**

**6.1 BMP Summary**

| BMP   | Status                | Activities in current reporting period   | Measurable goal   | Department / Person Responsible | Due           | Date completed or projected completion date | Additional details |
|---|-----------------------|--|---|---------------------------------|---------------|---|--------------------|
| 6-1<br>Develop/implement formal employee training program                       | Complete/<br>Ongoing  | Employee training through the Town and CIRMA   | Continue to increase town staff awareness of the effects of polluted stormwater on the environment and the necessity of a municipal stormwater management program.                                      | Public Works                    | July 1, 2017  | July 1, 2017                                |                    |
| 6-2 Implement MS4 property and operations maintenance                           | Completed/<br>Ongoing | Using MSDS thru OSHA working on getting Master List of materials and learning procedures of DPW and P&R<br><br>Evaluate and modify, as necessary, municipal vehicle and equipment parking, fueling, and maintenance practices. | Work with Building Maintenance and Parks & Recreation to make sure they are following guidelines. Provide list of products and materials being used annually.<br><br>Add proper signage where necessary | Public Works                    | July 1, 2018  | July 1, 2018                                |                    |
| 6-3 Implement coordination with interconnected MS4s                             | In Progress           | Attend local meetings to connect with towns and cities within the area to brainstorm and hear solutions to similar issues and situations   | Continue BMP – Speaking with surrounding towns.   | Public Works                    | Not Specified |   |                    |
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 | Ongoing               | Bethel continues to control sources of pollution to the MS4 through water quality monitoring, illicit discharge reporting, public outreach to residents, commercial, industrial facility owners.                               | Use GIS to track information from the coordinating departments  | Public Works                    | Not specified |   |                    |

|   |                      |   |  |              |               |                                       |  |
|---|----------------------|---|--|--------------|---------------|---------------------------------------|--|
| 6-5 Evaluate additional measures for discharges to impaired waters* | In Progress          | Have met with various staff members and commission to make sure all are prepared for tracking and reporting | Make sure the Town pays attention to what illicit discharges are happening in the Town and make sure that if there is an issue it is handled and reported.             | Public Works | Not Specified |                                       |  |
| 6-6 Track projects that disconnect DCIA                             | Ongoing              | Working on mapping and tracking of the locations<br><br>Eliminate curbing where possible                    | Attempt to reduce percentage of DCIA.<br><br>Annually track total acreage of DCIA that is disconnected as a result of redevelopment or retrofits                       | Public Works | July 1, 2017  | July 1, 2017                          |  |
| 6-7 Implement infrastructure repair/rehab program                   | In Progress          | Repair, rehabilitate, or retrofit MS4 infrastructure  | Make sure that all town owned buildings, materials and infrastructure is up to date and maintained.  | Public Works | July 1, 2021  | Anticipate completing by July 1, 2021 |  |
| 6-8 Develop/implement plan to identify/prioritize retrofit projects | Complete/<br>Ongoing | Starting to track on GIS of infrastructure issues   | Continue to track problem areas and make lists of any and all infrastructure issues and track them on GIS.<br><br>Develop retrofit plan and list of priority sites     | Public Works | July 1, 2020  | July 1, 2020                          |  |
| 6-9 Implement retrofit projects to disconnect 2% of DCIA            | Not Started          |   | Disconnect 2% of DCIA with retrofit projects   | Public Works | July 1, 2022  | Anticipate completing by July 1, 2022 |  |
| 6-10 Develop/implement street sweeping program                      | Complete/<br>Ongoing | Swept streets after winter storm season<br><br>Multiple sweeps for high priority area (downtown)            | Continue with our annual program and go out to streets several times a year as necessary.<br><br>Continue to inspect and sweep all Town owned streets and parking lots | Public Works | July 1, 2017  | July 1, 2017                          |  |

|  |                      |  |   |              |              |              |  |
|--|----------------------|--|---|--------------|--------------|--------------|--|
| 6-11<br>Develop/implement catch basin cleaning program | Complete/<br>Ongoing | Attempting to have catch basin cleanings added to yearly budget to set up program - We have significantly increased the number of catch basins cleaned this year and will continue to do so as long as budget permits. | Working on a budget that accepts catch basin cleaning.  | Public Works | July 1, 2020 | July 1, 2020 |  |
| 6-12<br>Develop/implement snow management practices    | Complete/<br>Ongoing | Working with staff to better the process<br><br>DPW mixes product before use – tests performed   | Continue using sand/salt mixture and not using any sort of liquid deicer.<br>Implement practices for deicing material management and snow and ice control | Public Works | July 1, 2018 | July 1, 2018 |  |

**6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.**

Add IDDE topics to employee training.  
Continue to conduct employee training.  
Continue sweeping, cleaning and inspecting catch basins. Following any issues with infrastructure closely.  
Inspect catch basins when they are cleaned and document the inspection findings.  
Continue to document pertinent maintenance operations.  
Maintain a list of complaints received regarding road and highway maintenance concerns.

### 6.3 Pollution Prevention/ Good Housekeeping reporting metrics

| Metrics  |  |
|--|--|
| Employee training provided for key staff   | Yes<br>April 15, 2019                      |
| Street sweeping  |  |
| Curb miles swept   | 220 miles                                  |
| Volume (or mass) of material collected   | 1200 Yards                                 |
| Catch basin cleaning   |  |
| Total catch basins in priority areas   | 50   |
| Total catch basins in MS4  | 2600                                       |
| Catch basins inspected   | 565  |
| Catch basins cleaned   | 565  |
| Volume (or mass) of material removed from all catch basins   | 347 t.                                     |
| Volume removed from catch basins to impaired waters (if known)   | N/A  |
| Snow management  |  |
| Type(s) of deicing material used   | Sand & Salt                                |
| Total amount of each deicing material applied  | 2500 t. & 625 t.                           |
| Type(s) of deicing equipment used  | Sander – Plow                              |
| Lane-miles treated   | 86 miles                                   |
| Snow disposal location   | N/A  |
| Staff training provided on application methods & equipment   | Yes<br>April 15, 2020<br>November 15, 2020 |
| Municipal turf management program actions (for permittee properties in basins with N/P impairments)                      |  |
| Reduction in application of fertilizers (since start of permit)  | N/A  |
| Reduction in turf area (since start of permit)   | N/A  |
| Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems) |  |
| Cost of mitigation actions/retrofits   | N/A  |

### 6.4 Catch basin cleaning program

| Provide any updates or modifications to your catch basin cleaning program   |
|---|
| <p>Vacuum truck, cleaning, inspection and report deficiencies. Cleaning schedule based on emergencies and high priority areas.</p> <p>Public Works has inspected 565 catch basins and cleaned 565 catch basins in 2020. The total number of catch basins cleaned from 2017 through 2020 is 945.</p> |

## 6.5 Retrofit program

**Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project.**

Nothing to Report

**Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.**

Nothing to Report

**Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.**

Nothing to Report

## Part II: Impaired waters investigation and monitoring

### 1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/ Phosphorus  Bacteria  Mercury  Other Pollutant of Concern

#### 1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.

Nothing to Report

### 2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

#### 2.1 Screening data

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

| Outfall ID                 | Sample date | Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern) | Results                                       | Name of Laboratory | Follow-up required? *   |
|----------------------------|-------------|---|---|--------------------|---|
| Stony Hill FH (Commercial) | 10/12/2020  | East Swamp Brook – Bacteria   | Results exceeded threshold in fresh waterbody | ACT Lab            | Y – We are seeing elevated levels of E. Coli in many storm waters this year. Most likely due to concentration effects of the drought and increased populations of warm blooded animals. |
| Willow Commercial)         | 10/12/2020  | Limekiln Brook – Bacteria   | Results exceeded threshold in fresh waterbody | ACT Lab            | Y – We are seeing elevated levels of E. Coli in many storm waters this year. Most likely due to concentration effects of the drought and increased populations of warm blooded animals. |
| Dittmar (Residential)      | 10/12/2020  | Limekiln Brook – Bacteria   | Results exceeded threshold in fresh waterbody | ACT Lab            | Y – We are seeing elevated levels of E. Coli in many storm waters this year. Most likely due to concentration effects of the drought and increased populations of warm blooded animals. |



|                         |            |                             |   |         |   |
|-------------------------|------------|-----------------------------|---|---------|---|
| Oak Ridge (Residential) | 10/12/2020 | East Swamp Brook – Bacteria | Results exceeded threshold in fresh waterbody | ACT Lab | Y – We are seeing elevated levels of E. Coli in many storm waters this year. Most likely due to concentration effects of the drought and increased populations of warm blooded animals. |
| Trowbridge (Industrial) | 10/12/2020 | Limekiln Brook – Bacteria   | Results below threshold                       | ACT Lab | N   |
| Bethel HC (Industrial)  | 10/12/2020 | East Swamp Brook – Bacteria | Results exceeded threshold in fresh waterbody | ACT Lab | Y – We are seeing elevated levels of E. Coli in many storm waters this year. Most likely due to concentration effects of the drought and increased populations of warm blooded animals. |

## 2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

| Outfall           | Sample date | Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern) | Results | Name of Laboratory (if used) | Follow-up required? * |
|-------------------|-------------|---|---------|------------------------------|-----------------------|
| Nothing to Report |             |   |         |                              |                       |
|                   |             |   |         |                              |                       |

\*Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

| Pollutant of concern        | Pollutant threshold  |
|-----------------------------|--|
| Nitrogen                    | Total N > 2.5 mg/l   |
| Phosphorus                  | Total P > 0.3 mg/l   |
| Bacteria (fresh waterbody)  | <ul style="list-style-type: none"> <li>● E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>● Total Coliform &gt; 500 col/100ml</li> </ul>   |
| Bacteria (salt waterbody)   | <ul style="list-style-type: none"> <li>● Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>● Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul> |
| Other pollutants of concern | Sample turbidity is 5 NTU > in-stream sample   |

### 3. Follow-up investigations (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

| Outfall                    | Status of drainage area investigation | Control measure implementation to address impairment |
|----------------------------|---------------------------------------|--|
| Willow (Commercial)        | In Progress                           | In Progress  |
| Stony Hill FH (Commercial) | In Progress                           | In Progress  |
| Dittmar (Residential)      | In Progress                           | In Progress  |
| Oak Ridge (Residential)    | In Progress                           | In Progress  |
| Bethel HC (Industrial)     | In Progress                           | In Progress  |

### 4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43)

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2020.

| Outfall           | Sample Date | Parameter(s) | Results | Name of Laboratory (if used) |
|-------------------|-------------|--------------|---------|------------------------------|
| Nothing to Report |             |              |         |                              |
|                   |             |              |         |                              |

**Part III: Additional IDDE Program Data**

**1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)**

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

| 1. Catchment ID (DEEP Basin ID) | 2. Category | 3. Rank |
|---------------------------------|-------------|---------|
| Nothing to Report               |             |         |
|                                 |             |         |
|                                 |             |         |

**2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)**

**2.1 Dry weather screening and sampling data from outfalls and interconnections**

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

| Outfall / Interconnection ID | Screening / sample date | Ammonia | Chlorine | Conductivity | Salinity | E. coli or enterococcus | Surfactants | Water Temp | Pollutant of concern | If required, follow-up actions taken |
|------------------------------|-------------------------|---------|----------|--------------|----------|-------------------------|-------------|------------|----------------------|--------------------------------------|
| Nothing to Report            |                         |         |          |              |          |                         |             |            |                      |                                      |
|                              |                         |         |          |              |          |                         |             |            |                      |                                      |

**2.2 Wet weather sample and inspection data**

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

| Outfall / Interconnection ID   | Sample date | Ammonia | Chlorine | Conductivity | Salinity | E. coli or Enterococcus | Surfactants | Water Temp | Pollutant of concern |
|--|-------------|---------|----------|--------------|----------|-------------------------|-------------|------------|----------------------|
| Please see Attached Sample Data – Stormwater Monitoring Report Form(s) |             |         |          |              |          |                         |             |            |                      |

### 3. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

#### 3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

| Outfall ID        | Receiving Water | System Vulnerability Factors |
|-------------------|-----------------|------------------------------|
| Nothing to Report |                 |                              |
|                   |                 |                              |
|                   |                 |                              |

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).

**3.2 Key junction manhole dry weather screening and sampling data**

| Key Junction Manhole ID | Screening / Sample date | Visual/ olfactory evidence of illicit discharge | Ammonia | Chlorine | Surfactants |
|-------------------------|-------------------------|---|---------|----------|-------------|
| Nothing to Report       |                         |   |         |          |             |
|                         |                         |   |         |          |             |

**3.3 Wet weather investigation outfall sampling data**

| Outfall ID   | Sample date | Ammonia | Chlorine | Surfactants |
|--|-------------|---------|----------|-------------|
| Please see Attached Sample Data – Stormwater Monitoring Report Form(s) |             |         |          |             |
|  |             |         |          |             |

**3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure**

| Discharge location | Source location | Discharge description | Method of discovery | Date of discovery | Date of elimination | Mitigation or enforcement action | Estimated volume of flow removed |
|--------------------|-----------------|-----------------------|---------------------|-------------------|---------------------|----------------------------------|----------------------------------|
| Nothing to Report  |                 |                       |                     |                   |                     |                                  |                                  |
|                    |                 |                       |                     |                   |                     |                                  |                                  |

#### Part IV: 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 those 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 made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

| Chief Elected Official or Principal Executive Officer | Document Prepared by |
|---|----------------------|
| Print name:   | Print name:          |
| Signature / Date:                                     | Signature / Date:    |



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

## Stormwater Monitoring Report Form

### PERMITTEE INFORMATION

Town: Town of Bethel

Mailing Address: 1 School St. Bethel CT 06801

Contact Person: Brittney Harrington Title: Engineering Tech. Phone: 203-794-8543

Permit Registration # \_\_\_\_\_

### SAMPLING INFORMATION

Discharge Location (Lat/Long or other description): Stony Hill Firehouse (41.42N 73.39W)

Please circle the appropriate area description: Industrial, Commercial, or Residential

Receiving Water (name, basin): East Swamp Brook

Time of Start of Discharge: 06:00

Date/Time Collected: 10/12/2020 10:07 Water Temperature: 12.00°C

Person Collecting Sample: Marc Acri

Storm Magnitude (inches): 0.76 Storm Duration (hours): Approximately 9 hours

Date of Previous Storm Event: 10/06/2020

### MONITORING RESULTS

| Parameter       | Method       | Results | Units      | Laboratory                       |
|-----------------|--------------|---------|------------|----------------------------------|
| Sample pH       | 4500HB       | 8.20    | S.U.       | Analytical Consulting Technology |
| Rain pH         | 4500HB       | 7.00    | S.U.       | Analytical Consulting Technology |
| Hardness        | EPA 200.7    | 7.3     | mg/L       | Analytical Consulting Technology |
| Conductivity    | EPA 120.1    | 15      | umho/cm    | Analytical Consulting Technology |
| Oil & Grease    | EPA 1664     | 2.1     | mg/L       | Analytical Consulting Technology |
| COD             | EPA 410.4    | 16      | mg/L       | Analytical Consulting Technology |
| Turbidity       | EPA 180.1    | 2       | NTU        | Analytical Consulting Technology |
| TSS             | SM2540D      | 16.5    | mg/L       | Analytical Consulting Technology |
| TP              | SM 4500-PE   | 0.190   | mg/L       | Analytical Consulting Technology |
| Ammonia         | EPA 350.1    | <0.10   | mg/L       | Analytical Consulting Technology |
| TKN             | SM 4500 Norg | 0.31    | mg/L       | Analytical Consulting Technology |
| NO <sub>2</sub> | EPA 300.0    | <0.03   | mg/L       | Analytical Consulting Technology |
| NO <sub>3</sub> | EPA 300.0    | <0.20   | mg/L       | Analytical Consulting Technology |
| E. coli         | SM9222G      | 800     | col./100mL | Analytical Consulting Technology |

### 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: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



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

## Stormwater Monitoring Report Form

### PERMITTEE INFORMATION

|   |
|---|
| Town: <u>Town of Bethel</u>   |
| Mailing Address: <u>1 School St. Bethel CT 06801</u>  |
| Contact Person: <u>Brittney Harrington</u> Title: <u>Engineering Tech.</u> Phone: <u>203-794-8543</u> |
| Permit Registration # _____   |

### SAMPLING INFORMATION

|   |  |
|---|--|
| Discharge Location (Lat/Long or other description): <u>Oak Ridge (41.412N 73.384W)</u>        |  |
| Please circle the appropriate area description: Industrial, Commercial, or <u>Residential</u> |  |
| Receiving Water (name, basin): <u>East Swamp Brook</u>  |  |
| Time of Start of Discharge: <u>06:00</u>  |  |
| Date/Time Collected: <u>10/12/2020 10:20</u> Water Temperature: <u>14.00°C</u>                |  |
| Person Collecting Sample: <u>Marc Acri</u>  |  |
| Storm Magnitude (inches): <u>0.76</u> Storm Duration (hours): <u>Approximately 9 Hours</u>    |  |
| Date of Previous Storm Event: <u>10/06/2020</u>   |  |

### MONITORING RESULTS

| Parameter       | Method       | Results | Units      | Laboratory                       |
|-----------------|--------------|---------|------------|----------------------------------|
| Sample pH       | 4500HB       | 7.57    | S.U.       | Analytical Consulting Technology |
| Rain pH         | 4500HB       | 7.00    | S.U.       | Analytical Consulting Technology |
| Hardness        | EPA 200.7    | 18.3    | mg/L       | Analytical Consulting Technology |
| Conductivity    | EPA 120.1    | 58      | umho/cm    | Analytical Consulting Technology |
| Oil & Grease    | EPA 1664     | 2.0     | mg/L       | Analytical Consulting Technology |
| COD             | EPA 410.4    | 54      | mg/L       | Analytical Consulting Technology |
| Turbidity       | EPA 180.1    | 2       | NTU        | Analytical Consulting Technology |
| TSS             | SM2540D      | 42.5    | mg/L       | Analytical Consulting Technology |
| TP              | SM 4500-PE   | 0.528   | mg/L       | Analytical Consulting Technology |
| Ammonia         | EPA 350.1    | <0.10   | mg/L       | Analytical Consulting Technology |
| TKN             | SM 4500 Norg | 0.55    | mg/L       | Analytical Consulting Technology |
| NO <sub>2</sub> | EPA 300.0    | <0.03   | mg/L       | Analytical Consulting Technology |
| NO <sub>3</sub> | EPA 300.0    | 0.239   | mg/L       | Analytical Consulting Technology |
| E. coli         | SM9222G      | >20000  | col./100mL | Analytical Consulting Technology |

### 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: _____  |             |
| Signature: _____  | Date: _____ |





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

## Stormwater Monitoring Report Form

### PERMITTEE INFORMATION

|   |
|---|
| Town: <u>Town of Bethel</u>   |
| Mailing Address: <u>1 School St. Bethel CT 06801</u>  |
| Contact Person: <u>Brittney Harrington</u> Title: <u>Engineering Tech.</u> Phone: <u>203-794-8543</u> |
| Permit Registration # _____   |

### SAMPLING INFORMATION

|   |  |
|---|--|
| Discharge Location (Lat/Long or other description): <u>Bethel Health Care (41.425N 73.397W)</u> |  |
| Please circle the appropriate area description: <u>Industrial</u> , Commercial, or Residential  |  |
| Receiving Water (name, basin): <u>East Swamp Brook</u>  |  |
| Time of Start of Discharge: <u>06:00</u>  |  |
| Date/Time Collected: <u>10/12/2020 10:40</u> Water Temperature: <u>12.90°C</u>                  |  |
| Person Collecting Sample: <u>Marc Acri</u>  |  |
| Storm Magnitude (inches): <u>0.76</u> Storm Duration (hours): <u>Approximately 9 Hours</u>      |  |
| Date of Previous Storm Event: <u>10/06/2020</u>   |  |

### MONITORING RESULTS

| Parameter       | Method       | Results | Units      | Laboratory                       |
|-----------------|--------------|---------|------------|----------------------------------|
| Sample pH       | 4500HB       | 7.46    | S.U.       | Analytical Consulting Technology |
| Rain pH         | 4500HB       | 5.00    | S.U.       | Analytical Consulting Technology |
| Hardness        | EPA 200.7    | 99.3    | mg/L       | Analytical Consulting Technology |
| Conductivity    | EPA 120.1    | 76      | umho/cm    | Analytical Consulting Technology |
| Oil & Grease    | EPA 1664     | 3.3     | mg/L       | Analytical Consulting Technology |
| COD             | EPA 410.4    | 44      | mg/L       | Analytical Consulting Technology |
| Turbidity       | EPA 180.1    | 55      | NTU        | Analytical Consulting Technology |
| TSS             | SM2540D      | 422     | mg/L       | Analytical Consulting Technology |
| TP              | SM 4500-PE   | 0.320   | mg/L       | Analytical Consulting Technology |
| Ammonia         | EPA 350.1    | <0.10   | mg/L       | Analytical Consulting Technology |
| TKN             | SM 4500 Norg | 0.63    | mg/L       | Analytical Consulting Technology |
| NO <sub>2</sub> | EPA 300.0    | <0.03   | mg/L       | Analytical Consulting Technology |
| NO <sub>3</sub> | EPA 300.0    | <0.20   | mg/L       | Analytical Consulting Technology |
| E. coli         | SM9222G      | 600     | col./100mL | Analytical Consulting Technology |

### 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: _____  |             |
| Signature: _____  | Date: _____ |



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

## Stormwater Monitoring Report Form

### PERMITTEE INFORMATION

|   |
|---|
| Town: <u>Town of Bethel</u>   |
| Mailing Address: <u>1 School St. Bethel CT 06801</u>  |
| Contact Person: <u>Brittney Harrington</u> Title: <u>Engineering Tech.</u> Phone: <u>203-794-8543</u> |
| Permit Registration # _____   |

### SAMPLING INFORMATION

|  |  |
|--|--|
| Discharge Location (Lat/Long or other description): <u>Willow St. (41.377N 73.425W)</u>        |  |
| Please circle the appropriate area description: Industrial, <u>Commercial</u> , or Residential |  |
| Receiving Water (name, basin): <u>Limekiln Brook</u>   |  |
| Time of Start of Discharge: <u>06:00</u>   |  |
| Date/Time Collected: <u>10/12/2020 11:10</u> Water Temperature: <u>14.0°C</u>                  |  |
| Person Collecting Sample: <u>Marc Acri</u>   |  |
| Storm Magnitude (inches): <u>0.76</u> Storm Duration (hours): <u>Approximately 9 Hours</u>     |  |
| Date of Previous Storm Event: <u>10/06/2020</u>  |  |

### MONITORING RESULTS

| Parameter       | Method       | Results | Units      | Laboratory                       |
|-----------------|--------------|---------|------------|----------------------------------|
| Sample pH       | 4500HB       | 7.45    | S.U.       | Analytical Consulting Technology |
| Rain pH         | 4500HB       | 6.00    | S.U.       | Analytical Consulting Technology |
| Hardness        | EPA 200.7    | 23.8    | mg/L       | Analytical Consulting Technology |
| Conductivity    | EPA 120.1    | 50      | umho/cm    | Analytical Consulting Technology |
| Oil & Grease    | EPA 1664     | 3.9     | mg/L       | Analytical Consulting Technology |
| COD             | EPA 410.4    | 85      | mg/L       | Analytical Consulting Technology |
| Turbidity       | EPA 180.1    | 9       | NTU        | Analytical Consulting Technology |
| TSS             | SM2540D      | 57.0    | mg/L       | Analytical Consulting Technology |
| TP              | SM 4500-PE   | 0.303   | mg/L       | Analytical Consulting Technology |
| Ammonia         | EPA 350.1    | <0.10   | mg/L       | Analytical Consulting Technology |
| TKN             | SM 4500 Norg | 1.27    | mg/L       | Analytical Consulting Technology |
| NO <sub>2</sub> | EPA 300.0    | <0.03   | mg/L       | Analytical Consulting Technology |
| NO <sub>3</sub> | EPA 300.0    | <0.20   | mg/L       | Analytical Consulting Technology |
| E. coli         | SM9222G      | 1300    | col./100mL | Analytical Consulting Technology |

### 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: _____  |             |
| Signature: _____  | Date: _____ |



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

## Stormwater Monitoring Report Form

### PERMITTEE INFORMATION

|   |
|---|
| Town: <u>Town of Bethel</u>   |
| Mailing Address: <u>1 School St. Bethel CT 06801</u>  |
| Contact Person: <u>Brittney Harrington</u> Title: <u>Engineering Tech.</u> Phone: <u>203-794-8543</u> |
| Permit Registration # _____   |

### SAMPLING INFORMATION

|  |  |
|--|--|
| Discharge Location (Lat/Long or other description): <u>Trow Bridge (41.355N / 73.422W)</u>   |  |
| Please circle the appropriate area description: <u>Industrial</u> Commercial, or Residential |  |
| Receiving Water (name, basin): <u>Limekiln Brook</u>   |  |
| Time of Start of Discharge: <u>06:00</u>   |  |
| Date/Time Collected: <u>10/16/2019 18:50</u> Water Temperature: <u>14.10°C</u>               |  |
| Person Collecting Sample: <u>Marc Acri</u>   |  |
| Storm Magnitude (inches): <u>0.76</u> Storm Duration (hours): <u>Approximately 9 Hours</u>   |  |
| Date of Previous Storm Event: <u>10/06/2020</u>  |  |

### MONITORING RESULTS

| Parameter       | Method       | Results | Units      | Laboratory                       |
|-----------------|--------------|---------|------------|----------------------------------|
| Sample pH       | 4500HB       | 7.75    | S.U.       | Analytical Consulting Technology |
| Rain pH         | 4500HB       | 7.00    | S.U.       | Analytical Consulting Technology |
| Hardness        | EPA 200.7    | 3.3     | mg/L       | Analytical Consulting Technology |
| Conductivity    | EPA 120.1    | 42      | umho/cm    | Analytical Consulting Technology |
| Oil & Grease    | EPA 1664     | 1.8     | mg/L       | Analytical Consulting Technology |
| COD             | EPA 410.4    | 12      | mg/L       | Analytical Consulting Technology |
| Turbidity       | EPA 180.1    | 2       | NTU        | Analytical Consulting Technology |
| TSS             | SM2540D      | 3.0     | mg/L       | Analytical Consulting Technology |
| TP              | SM 4500-PE   | 0.203   | mg/L       | Analytical Consulting Technology |
| Ammonia         | EPA 350.1    | <0.10   | mg/L       | Analytical Consulting Technology |
| TKN             | SM 4500 Norg | 0.16    | mg/L       | Analytical Consulting Technology |
| NO <sub>2</sub> | EPA 300.0    | <0.03   | mg/L       | Analytical Consulting Technology |
| NO <sub>3</sub> | EPA 300.0    | <0.20   | mg/L       | Analytical Consulting Technology |
| E. coli         | SM9222G      | 300     | col./100mL | Analytical Consulting Technology |

### 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: _____  |             |
| Signature: _____  | Date: _____ |



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

## Stormwater Monitoring Report Form

### PERMITTEE INFORMATION

|   |
|---|
| Town: <u>Town of Bethel</u>   |
| Mailing Address: <u>1 School St. Bethel CT 06801</u>  |
| Contact Person: <u>Brittney Harrington</u> Title: <u>Engineering Tech.</u> Phone: <u>203-794-8543</u> |
| Permit Registration # _____   |

### SAMPLING INFORMATION

|   |
|---|
| Discharge Location (Lat/Long or other description): <u>Dittmar (41.347N / 73.395W)</u>        |
| Please circle the appropriate area description: Industrial, Commercial, or <u>Residential</u> |
| Receiving Water (name, basin): <u>Limekiln Brook</u>  |
| Time of Start of Discharge: <u>06:00</u>  |
| Date/Time Collected: <u>10/12/2020 11:50</u> Water Temperature: <u>12.60°C</u>                |
| Person Collecting Sample: <u>Marc Acri</u>  |
| Storm Magnitude (inches): <u>0.76</u> Storm Duration (hours): <u>Approximately 9 Hours</u>    |
| Date of Previous Storm Event: <u>10/06/2020</u>   |

### MONITORING RESULTS

| Parameter       | Method       | Results | Units      | Laboratory                       |
|-----------------|--------------|---------|------------|----------------------------------|
| Sample pH       | 4500HB       | 7.58    | S.U.       | Analytical Consulting Technology |
| Rain pH         | 4500HB       | 7.00    | S.U.       | Analytical Consulting Technology |
| Hardness        | EPA 200.7    | 20.1    | mg/L       | Analytical Consulting Technology |
| Conductivity    | EPA 120.1    | 53      | umho/cm    | Analytical Consulting Technology |
| Oil & Grease    | EPA 1664     | 2.9     | mg/L       | Analytical Consulting Technology |
| COD             | EPA 410.4    | 105     | mg/L       | Analytical Consulting Technology |
| Turbidity       | EPA 180.1    | 3       | NTU        | Analytical Consulting Technology |
| TSS             | SM2540D      | 49.0    | mg/L       | Analytical Consulting Technology |
| TP              | SM 4500-PE   | 0.805   | mg/L       | Analytical Consulting Technology |
| Ammonia         | EPA 350.1    | <0.10   | mg/L       | Analytical Consulting Technology |
| TKN             | SM 4500 Norg | 4.51    | mg/L       | Analytical Consulting Technology |
| NO <sub>2</sub> | EPA 300.0    | <0.03   | mg/L       | Analytical Consulting Technology |
| NO <sub>3</sub> | EPA 300.0    | <0.20   | mg/L       | Analytical Consulting Technology |
| E. coli         | SM9222G      | 4800    | col./100mL | Analytical Consulting Technology |

### STATEMENT OF ACKNOWLEDGMENT

|  |
|--|
| <p>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.</p> <p>Authorized Official: _____</p> <p>Signature: _____ Date: _____</p> |
|--|

