How to complete the MS4 Annual Report template

(for “Existing” Permittees that originally registered for the 2004 MS4 general permit)

**General Instructions**

* Text highlighted yellow represents generic text to be updated.
* Example responses are provided in red text.
* Blue text specifies if a section is only required in certain reporting years.

**Completing Part I: Summary of Minimum Control Measure (MCM) Activities**

- Best Management Practice (BMP) Summary tables: Each MCM section starts with a BMP Summary table. A description of what to include in each column is below.

**BMP**: Self-explanatory.

**Status**: Provide status of BMP implementation (not started, ongoing/in progress, complete).

**Activities in current reporting period**: Describe ongoing and completed BMP activities and their status (Not started, ongoing, or completed). Briefly explain if you’re on schedule to meet the deadline or not. If not, explain why you don’t expect to meet the deadline.

**Measurable Goal**: Provide a measurable goal for the BMP.

**Dept/Person Responsible:** Identify the lead department and responsible person for that BMP. Note if it changed from the previous year. Third parties may be listed here if they are implementing the BMP but the permittee retains responsibility for tracking the BMP.

**Due**: BMP deadline from permit.

**Date completed / projected completion date:** Actual BMP completion date or when it’s scheduled to be completed.

**Additional details:** Add any additional details including reasons for overdue BMPs, specific location of BMP is applicable, reason for adding an additional BMP.

- Other Tables: Each MCM has specific data reporting requirements. Brief descriptions and/or example responses are provided for each requirement.

**Completing Part II: Impaired waters investigation and monitoring [This section required beginning in 2018]**

- Brief instructions are provided for each reporting requirement throughout Part III.

- For Section 2.1 and 2.2, 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) | * E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others
* Total Coliform > 500 col/100ml
 |
| Bacteria (salt waterbody) | * Fecal Coliform > 31 col/100ml for Class SA and > 260 col/100ml for Class SB
* Enterococci > 104 col/100ml for swimming areas or 500 col/100 for all others
 |
| Other pollutants of concern | Sample turbidity is 5 NTU > in-stream sample  |

**Completing Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]**

- Brief instructions are provided for each reporting requirement throughout Part IV.

**Completing Part IV: Certification -** Self-explanatory

MS4 General Permit

Town of \_\_\_\_\_\_\_ 2017 Annual Report

Existing MS4 Permittee

Permit Number GSM \_\_\_\_\_\_\_\_

[January 1, 2017 – December 31, 2017]

This report documents [Town/Institution’s] efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2017 to December 31, 2017.

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

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

**1.1 BMP Summary**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **BMP** | **Status** |  **Activities in current reporting period** | **Measurable goal** | **Department / Person Responsible** | **Due** | **Date completed or projected completion date** | **Additional details** |
| 1-1 Implement public education and outreach |  |  |  |  | Jul 1, 2018 |  |  |
| 1-2 Address education/ outreach for pollutants of concern\* |  |  |  |  | Jul 1, 2018 |  |  |
| **Example Additional BMP:***1-3 Integrate water quality into school curriculum*  | *In progress* | * *Coordinated with school officials to determine feasibility of program*
* *Collect and develop material covering land use (IC) and effect of water quality for 6th grade audience*
 | *Educate students on common stormwater topics* | *Conservation commission / D. Shrute* | *-* | *Plan to implement program during 2018 school year* | *Reason for addition: Extend public education program to schools* |

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

|  |
| --- |
|  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Program Element/Activity** | **Audience (and number of people reached)** | **Topic(s) covered** | **Pollutant of Concern addressed (if applicable)** | **Responsible dept. or partner org.** |
| ***Example: Educational stormwater sign installed at high school*** | *Students, parents, teachers (approx. 1000)* | *Impact of impervious cover, stormwater infiltration* | *Phosphorus, nitrogen* | *Parks & rec* |
| ***Example: Brochures distributed at IWWA desk*** | *Developers, home owners (approx. 150)* | *Impact of impervious cover, Septic systems & Fertilizer use* | *Bacteria, nitrogen and phosphorus* | *IWWA* |
|  |  |  |  |  |
|  |  |  |  |  |

**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 Comply with public notice requirements for the Stormwater Management Plan |  |  |  |  | Apr 3, 2017 |  |  |
| 2-2 Comply with public notice requirements for Annual Reports |  |  |  |  | Feb 15, 2018 |  |  |
| ***Example additional BMP:*** *2-3 Establish stormwater committee* | *In progress* | *In process of identifying committee members* | *Provide forum to coordinate SWMP implementation across depts. and commissions* | *Inland Wetlands / P. Vance* | *-* | *Summer 2018* | *Reason for addition: Committee will represent town departments & commissions with stake in stormwater mgmt.* |

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

|  |
| --- |
| *Hold quarterly stormwater committee meetings to review SMP implementation progress.* |

**2.3 Public Involvement/Participation reporting metrics**

|  |  |  |  |
| --- | --- | --- | --- |
| **Metrics** | **Implemented** | **Date** | **Posted** |
| Availability of the Stormwater Management Plan announced to public  | (y/n) |  | (Location / web address) |
| Availability of Annual Report announced to public | (y/n)  |  | (Location / web address) |

**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* | *Town is in process of completing written IDDE program using the CT IDDE program template* | *Develop written plan of IDDE program* | *Public works/ M. Scott* | Jul 1, 2018 | *Anticipate completing by the deadline of July 1, 2018.* |  |
| 3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas |  |  |  |  | Jul 1, 2019 |  |  |
| 3-3 Implement citizen reporting program |  |  |  |  | Jul 1, 2017 |  |  |
| 3-4 Establish legal authority to prohibit illicit discharges |  |  |  |  | Jul 1, 2018 |  |  |
| 3-5 Develop record keeping system for IDDE tracking |  |  |  |  | Jul 1, 2017 |  |  |
| 3-6 Address IDDE in areas with pollutants of concern |  |  |  |  | Not specified |  |  |
| **Example additional BMP:***3-7 Consolidate IDDE tracking spreadsheets* | *Not started* | *Compile all the IDDE tracking requirements into one spreadsheet* |  | *Public works / M. Scott* | - | *Jul 1, 2018* | *Reason for addition: Make it easier to track all IDDE activities* |

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

|  |
| --- |
| *The written program will be posted to the Dept of Public works webpage and a link listed in next year’s Annual Report; 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** |
|  |  |  |
|  |  |  |
|  |  |  |

**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**(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) |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for 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 waterbody or watershed, if known** |
| *Apartment complex on Oak Street* |  |  |
|  |  |  |
|  |  |  |

**3.7 IDDE reporting metrics**

|  |  |
| --- | --- |
| **Metrics** |  |
| Estimated or actual number of MS4 outfalls | # |
| Estimated or actual number of interconnections | # |
| Outfall mapping complete | (%) |
| Interconnection mapping complete | (%) |
| System-wide mapping complete (detailed MS4 infrastructure)  | (%) |
| Outfall assessment and priority ranking | (%) |
| Dry weather screening of all High and Low priority outfalls complete | # |
| Catchment investigations complete | #  |
| Estimated percentage of MS4 catchment area investigated | % |

**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).

|  |
| --- |
|  |

**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  |  |  |  |  | Jul 1, 2019 |  |  |
| 4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval |  |  |  |  | Jul 1, 2017 |  |  |
| 4-3 Review site plans for stormwater quality concerns |  |  |  |  | Jul 1, 2017 |  |  |
| 4-4 Conduct site inspections |  |  |  |  | Jul 1, 2017 |  |  |
| 4-5 Implement procedure to allow public comment on site development |  |  |  |  | Jul 1, 2017 |  |  |
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit |  |  |  |  | Jul 1, 2017 |  |  |
| **Example additional BMP:** *4-7 Develop stormwater compliance checklist* | *In progress* | *Developing checklist to provide developers on stormwater mgmt compliance requirements* | *Standardize plan review* | *Planning / G. Lewis* | - | *Jul 1, 2018* | *Reason for addition: Make it easier to ensure compliance with stormwater regulations* |

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

|  |
| --- |
| *Integrate stormwater compliance checklist into review process once completed.* |

**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 |  |  |  |  | Jul 1, 2021 |  |  |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects |  |  |  |  | Jul 1, 2019 |  |  |
| 5-3 Identify retention and detention ponds in priority areas |  |  |  |  | Jul 1, 2019 |  |  |
| 5-4 Implement long-term maintenance plan for stormwater basins and treatment structures |  |  |  |  | Jul 1, 2019 |  |  |
| 5-5 DCIA mapping |  |  |  |  | Jul 1, 2020 |  |  |
| 5-6 Address post-construction issues in areas with pollutants of concern |  |  |  |  | Not specified |  |  |
| **Example additional BMP:***5-7 Investigate alternative retention pond maintenance options* | *In progress* | *Identified and received quotes from two companies that rent goats to eat overgrown weeds* | *ID sustainable means of maintaining town owned detention ponds* | *Public works / D. Shrute* | - | *Jul 1 2018* | *Reason for addition: ID sustainable means of maintaining town owned detention ponds* |

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

|  |
| --- |
| *Hire company to maintain highest priority retention ponds.*  |

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

|  |
| --- |
| **Metrics** |
| Baseline (2012) Directly Connected Impervious Area (DCIA) | acres |
| DCIA disconnected (redevelopment plus retrofits) | acres this year / acres total |
| Retrofits completed | # |
| DCIA disconnected | % this year / % total since 2012 |
| Estimated cost of retrofits | $ |
| Detention or retention ponds identified | # this year /# total |

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

|  |
| --- |
|  |

**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 Develop/implement formal employee training program |  |  |  |  | Jul 1, 2017 |  |  |
| 6-2 Implement MS4 property and operations maintenance |  |  |  |  | Jul 1, 2018 |  |  |
| 6-3 Implement coordination with interconnected MS4s |  |  |  |  | Not specified |  |  |
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 |  |  |  |  | Not specified |  |  |
| 6-5 Evaluate additional measures for discharges to impaired waters\* |  |  |  |  | Not specified |  |  |
| 6-6 Track projects that disconnect DCIA |  |  |  |  | Jul 1, 2017 |  |  |
| 6-7 Implement infrastructure repair/rehab program |  |  |  |  | Jul 1, 2021 |  |  |
| 6-8 Develop/implement plan to identify/prioritize retrofit projects |  |  |  |  | Jul 1, 2020 |  |  |
| 6-9 Implement retrofit projects to disconnect 2% of DCIA |  |  |  |  | Jul 1, 2022 |  |  |
| 6-10 Develop/implement street sweeping program |  |  |  |  | Jul 1, 2017 |  |  |
| 6-11 Develop/implement catch basin cleaning program |  |  |  |  | Jul 1, 2020 |  |  |
| 6-12 Develop/implement snow management practices |  |  |  |  | Jul 1, 2018 |  |  |
| **Example additional BMP:***6-13 Map & Inventory highly erosive areas in town ROW* | *Not started* | *Collect information on eroding areas in ROW from highway maintenance personnel over course of normal operations* | *ID areas contributing large volume of sediment to town waterbodies*  | *Highway Dept / A. Bernard* | -  | *Jul 1, 2020* | *Reason for addition:* *Reduce sedimentation of waterways near town ROWs* |

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

|  |
| --- |
|  |

**6.3 Pollution Prevention/ Good Housekeeping reporting metrics**

|  |
| --- |
| **Metrics** |
| Employee training provided for key staff  | (y/n) / date(s) |
| Street sweeping |  |
|  |  |
| Curb miles swept | miles |
| Volume (or mass) of material collected | lbs or tons  |
| Catch basin cleaning |  |
| Total catch basins in priority areas | # |
| Total catch basins in MS4 | # |
| Catch basins inspected | # |
| Catch basins cleaned | # |
| Volume (or mass) of material removed from all catch basins | lbs or tons |
| Volume removed from catch basins to impaired waters (if known) | lbs or tons |
| Snow management |  |
| Type(s) of deicing material used |  |
| Total amount of each deicing material applied | lbs or tons |
| Type(s) of deicing equipment used |  |
| Lane-miles treated | miles |
| Snow disposal location |  |
| Staff training provided on application methods & equipment | (y/n) / dates(s) |
| Municipal turf management program actions (for permittee properties in basins with N/P impairments) |  |
| Reduction in application of fertilizers (since start of permit) | lbs or % |
| Reduction in turf area (since start of permit) | acres |
| Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems) |  |
| Cost of mitigation actions/retrofits | $ |

* 1. **Catch basin cleaning program**

|  |
| --- |
| **Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]** |
|  |

**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. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]** |
|  |

|  |
| --- |
| **Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual 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. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]** |
|  |

**Part II: Impaired waters investigation and monitoring [This section required beginning with 2018 Annual Report]**

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](http://www.nemo.uconn.edu/ms4).

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.**  |
|  |

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

**2.1 Screening data collected under 2017 permit**

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 (if used)** | **Follow-up required?** |
| *Ex. 6-3B* | *7/30/17* | *Bacteria* | *-* *E. coli 1,000 col/100ml**- T Coliform 600 col/100ml* | *Chemworks* | *Yes* |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**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?** |
| *Ex. 1-1A* | *11/4/16* | *Nitrogen* | *TN - 1.5 mg/l* | *Chemworks* | *No* |
| *Ex. 1-1B* | *10/15/16* | *Nitrogen* | *TN - 5.2 mg/l* | *Chemworks* | *Yes* |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**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** |
| *Ex. 1-1B* | *Completed investigation of outfall drainage area – athletic field complex drains into waterbody* | *Reduce fertilizer use on fields and create 50 foot vegetated buffer.* |
|  |  |  |
|  |  |  |

**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)** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]**

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** |
| *4011-00-2-R3* | *High Priority*  | *3* |
| *4000-33-2-R2* | *Low Priority* | *10* |
|  |  |  |

1. **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** |
| *6-4A* | *3/20/17* | *0.3 mg/l* | *Not detected* | *400 uS/cm* | *0.4 ppt* | *E. coli**200 col/100ml* | *0.2 mg/l* | *15 C* | *n/a* | *No* |
| *6-4B* | *3/20/17* | *-* | *-* | *-* | *-* | *-* | *-* | *-* | *-* | *Evidence of prior dry weather flow – raised priority of catchment investigation* |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

**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 / InterconnectionID | Sample date | Ammonia  | Chlorine | Conductivity | Salinity | E. coli or Enterococcus | Surfactants | Water Temp | Pollutant of concern |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

1. **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 |
| *1-1C* | *Mill River* | *1, 3, 5, 6, 8* |
|  |  |  |
|  |  |  |

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 that 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 that poor owner maintenance).

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Key Junction ManholeID | Screening / Sample date | Visual/ olfactory evidence of illicit discharge | Ammonia  | Chlorine | Surfactants |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**3.3 Wet weather investigation outfall sampling data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| OutfallID | Sample date | Ammonia  | Chlorine | Surfactants |
|  |  |  |  |  |
|  |  |  |  |  |

**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 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**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: |