

**MS4 General Permit
Town of Cromwell 2019 Annual Report
Existing MS4 Permittee
Permit Number GSM 000061
January 1, 2019 – December 31, 2019**

This report documents Cromwell's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2019 to December 31, 2019.

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	Ongoing	<ul style="list-style-type: none">Made a variety of pamphlets available to the Public at Town Hall covering a range of Stormwater topicsProvided a number of clickable links on the Engineering Department web page covering stormwater topics	18 brochures made available 10 web links made available	Engineering	Jul 1, 2018	Plan was implemented under previous general permit, and continues today	
1-2 Address education/ outreach for pollutants of concern*	Ongoing	<ul style="list-style-type: none">Obtaining pamphlets covering pollutant of concern information	3 brochures – one for each concern	Engineering	Jul 1, 2018	Implemented during summer 2018 inside Town Hall	

1-3 Available at Public information meetings	Ongoing	<ul style="list-style-type: none"> Town Engineer attends/participates at P&Z and Inland Wetlands meetings to educate on the MS4 requirements and stormwater quality issues 	Monthly attendance ongoing	Engineering	Jul 1, 2017	Plan was implemented under previous general permit, and continues today	
1-4 Continued Storm Drain Marking/Stenciling	On hold this period	<ul style="list-style-type: none"> Town relies on Boy Scouts or other service organizations to implement this activity 	0 stencils	Engineering Boy Scouts	Jul 1, 2017	Stencils were completed as a part of youth community service work requirement	Service hours went to other projects this year
1-5 Continued Watercourse Signage	Ongoing	<ul style="list-style-type: none"> Replace watercourse signage at street crossings 	NA	Highway	July 1, 2017	All named water bodies have signage	Replacement will be an ongoing effort and will occur as needed

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

The plan is to continue and to expand upon the work started. Plan to learn from the CTDEEP, other communities and groups about what additional public education resources are available, and implement them if possible.

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.
Clickable links on Engineering Department web site	General Public (web traffic is not recorded)	Impact of impervious cover, stormwater infiltration	Bacteria, nitrogen and phosphorus	Engineering
Brochures distributed at Town Hall (2 nd floor – Public Works, Engineering, Zoning, Wetlands, Building Dept. etc)	Developers, home owners (approx. 100)	Impact of impervious cover, Septic systems & Fertilizer use	Bacteria, nitrogen and phosphorus	Engineering
Town Engineer available at Planning & Zoning, Inland Wetlands and Town Council Meetings	General Public (broadcasted on the web), commissions, etc.	Commented on applications and Town projects in regards to stormwater	Varied	Engineering

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	Complete	Posted the Plan in Town Hall and on Town web site, and notice in Hartford Courant	One Time	Engineering	Completed		No public comments were received, no requests to view in person were made
2-2 Comply with public notice requirements for Annual Reports	Ongoing	The Plan shall be noticed on the Town's website annually	One Time	Engineering	Jan 31, 2020	Jan 31, 2020	
2-3 Present to Town Council, BOF& Public Works	Complete	Presentation of New Plan to stake holders	One Time	Engineering	Completed		
2-4 Participate in Household Hazardous Waste and Solid Waste Recycling	Ongoing	Transfer Station available to all residents, two hazardous waste collection days provided annually	Annually	Solid Waste Public Works	July 1, 2018	April 13 th , May 4 th July 20 th and October 12 th	128 vehicle trips = 3,200 pounds of household hazardous waste collected
2-5 CT River Conservancy – Cromwell Middle School Cleanup	Annual event	CT River Cleanup Event	Annually	Volunteer Group	NA	September 28, 2019	

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

Participate in regional spring and fall Household Hazardous Waste collection events organized by RiverCOG.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan to public	Y	All year	www.cromwellct.com
Availability of Annual Report announced to public	Y	February 15, 2019	www.cromwellct.com
Household Hazardous Waste Collection Day(s)	Y	April 13 th , May 4 th July 20 th and October 12 th	www.cromwellct.com

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	Complete	Written IDDE program using the CT IDDE program template was completed	Written plan of IDDE program was developed	Engineering	Jul 1, 2018	Completed May of 2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	The MS4 system is 100% mapped, updates are done as new infrastructure is acquired	Develop map and list	Engineering	Jul 1, 2019	Completed prior to July 1, 2017. As new subdivisions are built, new info is added to the map	100% of the Town is currently mapped. Roads not yet accepted by Town may not be included.
3-3 Implement citizen reporting program	Complete	Citizen reporting went online prior to July 1, 2017.	Receive citizen complaints	Engineering M. Shewokis	Jul 1, 2018	July 1, 2017	Two complaints received this year, both were referred to DOT District 1 as they were DOT drainage issues.
3-4 Establish legal authority to prohibit illicit discharges	Ongoing	Ordinance created, approved by Town Council and Public Hearing	Establish Legal Authority	Engineering J. Harriman	Jul 1, 2018	Adopted May 9, 2018 – Published August 1, 2018	
3-5 Develop record keeping system for IDDE tracking	Ongoing	Spreadsheet will be developed when first IDDE is reported	Create spreadsheet	Engineering J. Harriman	Jul 1, 2017	TBD	Town staff are not aware of any illicit discharges. Cromwell sewers are separate from storm sewers. When/if IDDE sampling shows signs of

							connection or discharge this will be completed.
3-6 Address IDDE in areas with pollutants of concern	Ongoing	Engineering department began IDDE sampling	Sampling continued this year	Engineering M. Shewokis J. Harriman	Not specified	Sampling has begun, will continue in future permit years	
3-7 Detailed MS4 infrastructure mapping	Complete	The MS4 system is 100% mapped, updates are done as new infrastructure is acquired	Develop map and list	Engineering	Jul 1, 2020	Completed prior to July 1, 2017. As new subdivisions are built, new info is added to the map	100% of the Town is currently mapped. Roads not yet accepted by Town may not be included.
3-8 Complete list and maps of all MS4 outfalls throughout municipality (>10")	Complete	The MS4 system is 100% mapped, updates are done as new infrastructure is acquired	Develop map and list	Engineering	Jul 1, 2022	Completed prior to July 1, 2017. As new subdivisions are built, new info is added to the map	100% of the Town is currently mapped. Roads not yet accepted by Town may not be included.

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

IDDE Sampling program will continue as weather permits.

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

Date of Report	Location / suspected source	Response taken
June 2019	136 Berlin Road Burger King Parking Lot – fyer oil and grease dumping into catch basin.	Referred to DOT District 1 – This private drainage ties into the DOT MS4 in Berlin Road.
July 2019	198 West Street – Nail Salon – discharge to gutter in West Street	Referred to DOT District 1 – This private discharge ties into the DOT MS4 in West Street.

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)
None						

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

A review of the records from Cromwell WPCA indicate there have been no SSOs to the MS4 from July 2012 to the present. The following departments have no knowledge of illicit discharges to the MS4 (Engineering, Zoning, Health, Public Works, Building).

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
<i>Residential home on Nooks Hill Road</i>	Ongoing – will most likely not be addressed until house goes through probate process.	No direct impact – inland wetlands are 500 feet away This is the only septic system failure of record at this time

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	207
Estimated or actual number of interconnections	Est. 17
Outfall mapping complete	100 %
Interconnection mapping complete	100%
System-wide mapping complete (detailed MS4 infrastructure)	100 %
Outfall assessment and priority ranking	0 %
Dry weather screening of all High and Low priority outfalls complete	126 this year 170 total

Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0%

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).

Is years training consisted of the dissemination of the storm water pond and treatment structure inventory which includes mapping of location and the maintenance schedule of each. This information was not previously compiled so proving the material was in itself a learning experience for many employees.

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	In Planning Stage	Town Staff (Town Planner and Town Engineer) have met to discuss permit requirements	Upgrade regulations	Town Planner Town Engineer	Jul 1, 2019	August 8, 2015	After consideration Town has decided not to make changes, as current regulations appear to meet the criteria.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Town Planner forwards applications to various department heads for review	Review applications	Town Planner Zoning Officer Town Engineer Fire Chief Police Chief	Jul 1, 2017	This has been in place since before 2012	This has been Town policy for many years.
4-3 Review site plans for stormwater quality concerns	Ongoing	Site plan applications reviewed by Town Engineer, Zoning Officer & Town Planner	42 applications reviewed	Town Planner Zoning Officer Town Engineer	Jul 1, 2017	37 P&Z applications 5 IW applications Reviewed over the course of the year	
4-4 Conduct site inspections	Ongoing	Conduct frequent inspections (ZEO, Engineering)	35 sites inspected in 2019	Engineering ZEO	Jul 1, 2017	Ongoing	
4-5 Implement procedure to allow public comment on site development	Ongoing	Allow Public Comment on Site Development projects	Public comment was allowed at all P&Z & Wetlands meetings. 36 meetings scheduled	Town Planner ZEO	Jul 1, 2017	Public Comment is on every IWC & P&Z agenda. Public Hearings also allow	Very little, if any, public comment is received. Meeting minutes are available for review, and

						application specific comment	commissions consider all public comment.
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	Notify developers of DEEP permit requirement	Append procedure to Town Engineer's review comments	Town Engineer	Jul 1, 2017	Town Engineer inserts a handout and a general comment to all applications where this applies. Ongoing	

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

Continue to follow present SOP.

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	Pending	No activity this period	Update zoning regulations	PZC Town Planner	Jul 1, 2021	By permit due date	P&Z regulations should be updated in next fiscal year. Budget request has been made.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Started	Town Engineer is requesting 1" retention. No written regulation exists yet. Compliance has been good.			Jul 1, 2019	By Permit Due Date	
5-3 Identify retention and detention ponds in priority areas	Completed	A binder of above ground and underground structures was created	Create list	Engineering	Jul 1, 2019	Completed January of 2019	Binder includes the maintenance requirement for each facility

5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	In Progress	A binder of above ground and underground structures was created	Maintain infrastructure annually	Highway Division	Jul 1, 2019	Completed January of 2019	Binder includes the maintenance requirement for each facility. Maintenance has begun
5-5 DCIA mapping	Started	A contracted services budget request has been submitted for approval FY2020.	Map DCIA	Engineering	Jul 1, 2020	By Permit Due Date	AppGEO services has been working DCIA for Town. A draft of the mapping was made available to the Town 3/31/20.

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

1. Maintain the new list of retention/detention ponds in Town that are the Town's responsibility to maintain. Utilize new system of record keeping of the maintenance of these facilities.
2. Obtain a template or sample LID legal authority to update the Town Zoning Regulations.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	TBD
DCIA disconnected (redevelopment plus retrofits)	
Retrofits completed	0 – will be doing a lookback at some point
DCIA disconnected	0 - lookback
Estimated cost of retrofits	
Detention or retention ponds identified	18 (includes underground structures)

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

The Town is using contracted services budget by hiring AppGEO to establish the baseline.

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	Ongoing	Trained in January of 2019	Train once annually	Public Works Engineering	Jul 1, 2017	January 2019	Training on inventory/maintenance manual for stormwater treatments.
6-2 Implement MS4 property and operations maintenance	In Progress	A binder with all treatment and detention structures with maintenance was created	SOP created	Public Works	Jul 1, 2018	January 2019	Highway superintendant has a copy of the binder with a way to record the maintenance activity
6-3 Implement coordination with interconnected MS4s	Not started				Not specified		Still need clarification as to what this entails. Not sure it applies to Town.
6-4 Develop/implement program to control other sources of pollutants to the MS4	Not started				Not specified		
6-5 Evaluate additional measures for discharges to impaired waters*	Not started				Not specified		
6-6 Track projects that disconnect DCIA	In Progress	DCIA baseline has been in development. Once complete will come up with a plan and complete a look back	Maintain a list to track progress	Engineering	Jul 1, 2017		

6-7 Implement infrastructure repair/rehab program	In Progress	I/I repair project phasing continued in 2019	Reduce I/I in the sanitary sewer system	Cromwell WPCA	Jul 1, 2021	Ongoing	
6-8 Develop/implement plan to identify/prioritize retrofit projects	Not started				Jul 1, 2020		
6-9 Implement retrofit projects to disconnect 2% of DCIA	In progress		Disconnect 2% of DCIA	Public Works Engineering	Jul 1, 2022		
6-10 Develop/implement street sweeping program	Complete	The Town sweeps twice per year. In spring after snow, and in fall during leaf collection. Every mile is swept 2x	Sweep twice annually	Highway Department	Jul 1, 2017	Spring and fall of 2019 and as needed	
6-11 Develop/implement catch basin cleaning program	Complete	The Town cleans at least 1/3 of the basins annually on a rotating schedule	850 basins cleaned this year	Highway Department	Jul 1, 2020	2019	
6-12 Develop/implement snow management practices	In progress	Implemented a salt brine pre-treatment system in problem areas (hills, curves, bridges)	Reduce salt use with brine solution	Highway Department	Jul 1, 2018	2019	Not much snow and ice this year. Doesn't compare will to previous years as a data point.

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	January 2019
Street sweeping	
Curb miles swept	234.6 miles (2x both sides of road)
Volume (or mass) of material collected	50 yards (leaves)
Catch basin cleaning	
Total catch basins in priority areas	788
Total catch basins in MS4	1937
Catch basins inspected	850
Catch basins cleaned	850
Volume (or mass) of material removed from all catch basins	3 yards
Volume removed from catch basins to impaired waters (if known)	unknown
Snow management	
Type(s) of deicing material used	Treated salt
Total amount of each deicing material applied	1350 tons average
Type(s) of deicing equipment used	Plow truck sander
Lane-miles treated	117.3
Snow disposal location	NA this year
Staff training provided on application methods & equipment	Y – ongoing
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	No reduction
Reduction in turf area (since start of permit)	No reduction
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	<\$100 (pet waste bags)

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program

The Town is divided into three regions; east of Main Street (Route 99), between Main Street and Shunpike Road (Route 3) and west of Shunpike Road. Each section is cleaned every three years on a rotating schedule. The town hasn't used sand for snow operations in many years and streets are swept twice annually. It is our experience that this schedule ensures that there is not a significant buildup in the sumps that would lead to a discharge at an outfall. Catch basins near construction sites are monitored by engineering and zoning department staff, and any sediment buildup requiring removal is completed by the offending development/developer through Notice of Violation.

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. [\[Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.\]](#)

The Town will have the DCIA baseline calculation completed by the due date (July 2020). At that time we will inventory a lookback at completed projects to see how many years of credits we have and develop a plan going forward. The Raymond Place project completed in 2018 will be a significant credit, as will the downtown parking lot project under construction now. Smaller completed project credits are under review.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [\[Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.\]](#)

See above – this will be completed once the DCIA baseline data is available.

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [\[Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.\]](#)

Still in development.

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>.

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.

Impaired water samples were collected on June 13, 2019. E.Coli levels in wet weather screenings continue to be much higher than allowed. Need to determine how to come up with a background level for E.Coli to compare our results because dry weather screening completed on these outfalls is generally showing no discharge, and when a discharge has been collected E.Coli has not been a problem.

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 (if used)	Follow-up required?
WI-0002	6/13/19	Nitrogen, Phosphorous & Bacteria	- E. coli = 1733 col/100ml - P = 0.08 - Total N = 2.83	EML	Yes
WI-0003	6/13/19	Nitrogen, Phosphorous & Bacteria	- E. coli = 1986 col/100ml - P = 0.1 - Total N = 1.79	EML	Yes
WI-0029	6/13/19	Nitrogen, Phosphorous & Bacteria	- E. coli = 2420 col/100ml - P = ND - Total N = 1.64	EML	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?
CC-0025	7/29/16	Nitrogen, Phosphorous & Bacteria	- E. coli = "present" - P = 0.18 - Total N = 1.14	EML	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
NA		

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)
CR-OF-0006		Nitrogen, E.Coli		
MR-OF-0028		E.Coli		
WI-OF-0008		E.Coli		
CO-OF-0020		E.Coli		
WI-OF-0007		Turbidity, E.Coli		
CO-OF-0016		E.Coli, Nitrogen		

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
4000-00-6+R18	Low Priority	4
4000-32-1	Low Priority	1
4000-36-1	Low Priority	2
4600-17-1	Low Priority	3
4000-00-6+R19	Low Priority	5
4000-00-6+R20	Low Priority	6
4000-00-6+R21	Low Priority	7
4000-00-6+R22	High Priority	10
4600-00-3-R7	Low Priority	8
4000-00-6+R23	High Priority	11
4600-00-3-R15	Low Priority	9
4000-31-1-L1	High Priority	12
4000-32-1-L1	High Priority	13
4000-36-1-L3	High Priority	14
4600-31-1	High Priority	15
4600-18-1-L1	High Priority	16

4600-23-1	High Priority	17
4600-00-3-R16	High Priority	18
4600-22-1	High Priority	19
4600-27-1	High Priority	20
4600-22-2-R1	High Priority	21
4600-00-3-R8	High Priority	22
4600-00-3-R9	High Priority	23
4600-00-3-R10	High Priority	24
4600-00-3-R11	High Priority	25
4600-00-3-R13	High Priority	26
4600-00-3-R14	High Priority	27
4600-00-3-R16	High Priority	28

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
WI-OF00002	8/12/19	1.10	ND			1.00		68		NA
PA-OF-0002	8/12/19	0.34	ND			16.00		66		NA

NO-OF-0002	9/17/19	0.93	ND			2.00		64		NA
CR-OF-0006	8/12/19	1.10	ND			1.00		68		NA

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

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

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

3.3 Wet weather investigation outfall sampling data

Outfall ID	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

Print name: Anthony Salvatore – Town Manager

Signature / Date:

 4/1/2020

Document Prepared by

Print name: Jon Harriman – Town Engineer

Signature / Date:

 4/1/20