

MS4 General Permit
Town of Cromwell 2022 Annual Report
Permit Number GSM 000061
January 1, 2022 – December 31, 2022
Primary MS4 Contact: Jon Harriman, Town Engineer, jharriman@cromwellct.com

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, 2022 to December 31, 2022.

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

BMP	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable Goal	Department / Person Responsible	Additional details
1-1 Implement public education and outreach	<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	Various web links	Town Hall Town of Cromwell website	Unknown – accessible to all	10 brochures made available 11 web links made available	Engineering	
1-2 Address education/outreach for pollutants of concern	<ul style="list-style-type: none">Obtaining pamphlets covering pollutant of concern information		Town Hall	Unknown – accessible to all	4 brochures – one for each concern	Engineering	

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	<50		Engineering	Plan was implemented under previous general permit, and continues today
1-4 Continued Storm Drain Marking/Stenciling	None this year	<ul style="list-style-type: none"> • 	Boy Scouts of America	unknown		Engineering	
1-5 Continued Watercourse Signage	Ongoing	<ul style="list-style-type: none"> • Street sign supplier 	Highway Department	unknown		Public Works	Ongoing and as-needed

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

<p>The plan is to continue and to expand upon the work started. The Cromwell Town Hall has seen an increase in visitors following COVID. More brochures or pamphlets were picked up this year. Plan to learn from the CTDEEP, other communities and groups about what additional public education resources are available, and implement them if possible.</p>	
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2. Public Involvement/Participation (Section 6(a)(2) / page 21)

2.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Location Posted	Additional details
2-1 Final Stormwater Management Plan publicly available	complete	One Time		Engineering		www.cromwellct.com	
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	complete	One Time		Engineering		www.cromwellct.com	
2-3 Present to Town Council, BOF& Public Works	Complete	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	Quarterly collection events.	163 residents = 4379 lbs latex paint, 4541 lbs oil paint, 1516 lbs flammable liquid wastes collected
2-5 CT River Conservancy – Cleanup	Annual event	CT River Cleanup Event	Annually	Volunteer Group	NA	September 23, 2022	Cromwell Middle School & DPW

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

Participate in regional Household Hazardous Waste collection events organized by RiverCOG. Assist with hauling waste generated in Source to Sea river clean up event(s). Offer catch basin labeling to local Boy Scout Troop for service hours.

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

3.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
3-1 Develop written IDDE program	Complete	Plan implementation continued	Written plan of IDDE program was developed	Engineering	Completed May of 2018	Posted at www.cromwellct.com
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	The Town continues to update the map when changes (roadway reconstruction, new infrastructure) occur	Develop map and list	Engineering	Completed prior to July 1, 2017. As new subdivisions are built, new info is added to the map	Outfall locations can be seen on town GIS website www.cromwellct.com The engineering department maintains the full data set
3-3 Implement citizen reporting program	Ongoing	Plan implementation continued	Receive citizen complaints	Engineering M. Shewokis	Citizen reporting went online prior to July 1, 2017.	Received a complaint from DPW – resident dumping cooking oil in catch basin. Citizen was verbally notified to cease and desist.
3-4 Establish legal authority to prohibit illicit discharges	Complete	Ordinance created, approved by Town Council and Public Hearing	Establish Legal Authority	Engineering J. Harriman	Adopted May 9, 2018 – Published August 1, 2018	Town Code is posted at www.cromwellct.com
3-5 Develop record keeping system for IDDE tracking	Ongoing	Spreadsheet will be developed when first IDDE is reported	Create spreadsheet	Engineering J. Harriman	TBD	Town staff have not detected 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 continues IDDE sampling	Sampling continued this year	Engineering M. Shewokis J. Harriman	Began sampling in 2020	

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	Completed prior to July 1, 2017. As new subdivisions are built, new info is added to the map	Outfall locations can be seen on town GIS website www.cromwellct.com The engineering department maintains the full data set
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	Completed prior to July 1, 2017. As new subdivisions are built, new info is added to the map	Outfall locations can be seen on town GIS website www.cromwellct.com The engineering department maintains the full data set

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

The written program is 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 Provide a record of all citizen reports of suspected illicit discharges and other illicit discharges occurring during the reporting period and SSOs occurring July 2017 through end of reporting period using the following table. Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

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)
17 Cider Hill "cooking oil in catch basin"	June 2022	Discharged to MS4 catch basin	1.5 gallons	Cooking oil from fish fry	Met with resident, informed them the storm sewer was only for stormwater. Resident agreed not to do it again.	Not tested – resident confirmed

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

Method used to track illicit discharge reports	Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known	Dept. / Person responsible
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The Health Department tracks septic	None reported this year	NA	NA	Health Department/S Nesci

3.5 Briefly describe the method and effectiveness of said method used to track illicit discharge reports.

The Town has not received any reports or complaints this year.

3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	214
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	100 %
Dry weather screening of all High and Low priority outfalls complete	All accessible outfalls have been assessed
Catchment investigations complete	None required per testing montiroing results
Estimated percentage of MS4 catchment area investigated	95%

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

The Town combines IDDE training with general MS4 and Industrial stormwater permit training session on an annual basis.

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

4.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	Town Staff (Town Planner and Town Engineer) have met to discuss permit requirements	Upgrade regulations	Town Planner Town Engineer	August 8, 2015	Zoning regulations are currently being updated. Should complete 2023
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	This has been in place since before 2012	This has been Town procedure all along
4-3 Review site plans for stormwater quality concerns	Ongoing	Site plan applications reviewed by Town Engineer, Zoning Officer & Town Planner	258 applications reviewed	Town Planner Zoning Officer Town Engineer	This has been in place since before 2012	This has been Town procedure all along
4-4 Conduct site inspections	Ongoing	Conduct frequent inspections (ZEO, Engineering)	2,652 inspections at 17 sites in 2022	Engineering ZEO	This has been in place since before 2012	This has been Town procedure all along
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 & Weltands meetings.	Town Planner ZEO	This has been in place since before 2012	Public Comment is on every IWC & P&Z agenda. Public Hearings also allow application specific 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
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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 (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Complete	There is a plan to update the entire zoning regulations. Pending that the Town has created a handout that goes to all P&Z and wetlands applicants informing them the LID must be considered.	Update zoning regulations – update application packet	PZC Town Planner	Jul 1, 2022	When the Town updates the zoning regulation the LID language will be added to the regulations. Regulation update began in 2022, should complete in 2023.
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.		PZC Town Engineer	Jul 1, 2019	This will change when the revised regulations are incorporated this year.

5-3 Identify retention and detention ponds in priority areas	Completed	A binder of above ground and underground structures was created. This list is for the entire Town, not just priority areas.	Create list	Engineering	Jul 1, 2019	This is updated as new development occurs
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	The Town manufactured a bracket to attach a mower head to mini excavator allowing for clearing in pond structures that were not previously maintained.
5-5 DCIA mapping	Baseline completed		Map DCIA	Engineering	Jul 1, 2020	Completed June 2020

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

1. Circle back to retention ponds that were full of water last year preventing maintenance below the water line.
2. Update zoning regs to include LID..

5.3 Post-Construction Stormwater Management reporting metrics

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/post-construction.htm>. Scroll down to the DCIA section.

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	319 acres DCIA = 12.5%
DCIA disconnected (redevelopment plus retrofits)	15.6 acres = 4.9%
Retrofit projects completed	1
DCIA disconnected	15.6 acres
Estimated cost of retrofits	\$4.12M total project cost
Detention or retention ponds identified	19 (includes underground structures)

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

The Town used it's GIS consultant, AppGEO, to perform this task using GIS analysis and DEEP guidance.

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

6.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
6-1 Develop/implement formal employee training program	Ongoing	No training this year due to COVID restrictions	Train once annually	Public Works Engineering	2012	Training videos not viewed this year.
6-2 Implement MS4 property and operations maintenance	In Progress	A binder with all treatment and detention structures with maintenance was utilized	SOP created	Public Works	January 2019	
6-3 Implement coordination with interconnected MS4s	Not started	Consulted with District 1 drainage engineer in regards to interconnections on Rte 3 at Coles Road.		Engineering	Not specified	DOT constructed this interconnection in the fall of 2022.
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	Ongoing	DCIA baseline calculation completed	Maintain a list to track progress	Engineering	DCIA calculation completed June, 2020.	
6-7 Implement infrastructure repair/rehab program	In Progress	I/I repair project first phases completed in 2018/2019. 2020 & 2022 consisted of I/I studies	Reduce I/I in the sanitary sewer system	Cromwell WPCA	2018 started	Repair project to begin 2023.
6-8 Develop/implement plan to identify/prioritize retrofit projects	In progress	Plan is to implement retrofits into capitol projects as they arise and where finding allows.	Disconnect impervious surfaces	Engineering	Jul 1, 2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA	In progress	Completing analysis of lookback projects. A Town parking lot was reconstructed including redirecting runoff to a rain garden/infiltration area. ½ of parking lot area has been disconnected.	Disconnect 2% of DCIA	Public Works Engineering	Began in 2016	Complete
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 road mile is swept 2x	Sweep twice annually	Highway Department	Start date unknown	The Town has had a street sweeper for well over a decade. Sweeping program predates this permit.
6-11 Develop/implement catch basin cleaning program	Complete	The Town cleans at least 1/3 of the basins annually on a rotating schedule	800 basins cleaned this year	Highway Department	Start date unknown	The catch basin cleaning program has been in effect prior to 2012. Janets Sweeping is the contractor
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	Salt brine trucks purchased in 2018	Very little snow removal/salting done this year due to mild winter.

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

The Town will continue to implement SOP activities – street sweeping twice per year, catch basin cleaning and stormwater treatment infrastructure maintenance.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	(y/n) / date(s)
Street sweeping	
Curb miles swept	234.6 miles (2x both sides of road)
Volume (or mass) of material collected	31 yards (mostly leaves)
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	788
Total catch basins town- (or institution-) wide	1937
Catch basins inspected	751
Catch basins cleaned	751
Volume (or mass) of material removed from all catch basins	~5 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, salt brine truck
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	117.3
Snow disposal location	Park parking lots
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	NA

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. (Due 7/1/20)

The Town completed a large roadway/drainage reconstruction project in 2016. This project encompassed a densely populated neighborhood of nine streets referred to as the Raymond Place project. The area was/is 25% DCIA. The project consisted of a new drainage system that ran the drainage to a new storm water pond constructed in the northern end of Watrous Park. The project effectively disconnected 15.6 acres of DCIA. The 2% goal was reached with the first look back project – the DCIA reduction is 4.9%. There was no disconnect project work this year.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection annually in future years. (Due 7/1/22)

A group of UCONN students studied various Town properties and evaluated opportunities to disconnect impervious surface. These potential projects are under consideration currently.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

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.

The Town continued monitoring/sampling on July 18, 2022.

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

2.1 Screening data

Complete the table below to report data for any wet weather sampling completed for MS4 outfalls that discharge directly to a stormwater impaired waterbody during the reporting period. For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

Each Annual Report will add on to the previous year's data showing a cumulative list of sampling data. **You may also attach an excel spreadsheet with the same data rather than copying it into this table.** If you do attach a spreadsheet, please write "See Attachment" below.

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required? *

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"> E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	<ul style="list-style-type: none"> 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

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
CR-0006	Ongoing – possible septic – no reported/known failures or issues	Increase street sweeping
CC-0008	Ongoing – source undetermined	Increase street sweeping
CC-0004	Ongoing – source undetermined	Increase street sweeping
WI-0008	Ongoing – source undetermined	Increase street sweeping
WI-0007	Ongoing – source undetermined	Increase street sweeping
WI-0029	Ongoing – source undetermined	Increase street sweeping

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

Once outfall sampling 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, 2022. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
CR-0006	41°36'41.1804"N -72°39'10.9524"W	7/18/22	E. Coli	2406	EML
WI-0007	41°36'46.152"N -72°39'56.1684"W	7/18/22	E. Coli	1986	EML
WI-0008	41°36'47.1888"N -72°39'W	7/18/22	E. Coli	3466	EML
WI-0029	41°36'35.3055"N -72°39'09.816"W	7/18/22	E. Coli	2828	EML
CC-0004	41°36'33.8184"N -72°39'19.6308"W	7/18/22	E. Coli	3972	EML
CC-0008	41°36'27.2448"N -72°39'19.8576"W	7/18/22	E. Coli	4840	EML

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
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

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the blue column of the Monitoring comparison chart and the IDDE baseline monitoring flowchart.

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall / Interconnection ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

NOTE: Dry weather screening program completed in previous year. No follow up required, other than sampling submerged outfalls.

2.2 Wet weather sample and inspection data

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall / Interconnection ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern

NOTE: Dry weather screening program completed – did not identify any outfalls for wet weather sampling.

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

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

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

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write "See Attachment" below.

Key Junction Manhole ID	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write “See Attachment” below.

Outfall ID	Latitude / Longitude	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: Anthony J. Salvatore – Town Manager

Print name: Jon Harriman, P.E. – Town Engineer

Signature / Date:

 4/11/2023
Email: townmanager@cromwellct.com

Signature / Date:

 4/11/23
Email: jharriman@cromwellct.com