

MS4 General Permit
VA Connecticut Healthcare System West Haven 2020 Annual Report DRAFT
New MS4 Permittee
Permit Number GSM000133
January 1, 2021 – December 31, 2021

This report documents VA Connecticut Healthcare System’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2021 to December 31, 2021.

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	In progress	SPCC training & construction storm water protection, storm runoff reduction in new design	Development and distribution of appropriate and topical educational outreach materials to relevant audiences	VACT Safety and FMS	Jul 1, 2019	May, 9, 2019, August 29, 2019	
1-2 Address education/ outreach for pollutants of concern*	In progress	SPCC training & construction storm water protection, storm runoff reduction in new design	<i>Development and distribution of appropriate and topical</i>	VACT Safety and FMS	Jul 1, 2019	May 9, 2019 August 29, 2019	

*educational
outreach
materials to
relevant
audiences*

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

Educate oil handling personnel on SPCC Plan. Educate the grounds maintenance staff on the impacts of their duties and of run-off on the Long Island Sound, via postings in their break room/administrative space. Provide information to employees, patients and visitors via CCTV and screen savers on reducing their impact on stormwater – to cover topics of chemical, bacterial, and nutritional pollutant and impacts of illicit discharge.

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.
storm water protection during construction	Educate Design Development Engineers	storm water runoff reduction	Erosion control,	GEMS Program Manager & FMS Engineers
Periodic Safety inspection on construction sites and ground rounds	Design Development Engineers	storm water protection	Erosion control,	GEMS Program Manager & FMS Engineers

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	Completed	Draft Stormwater Management Plan was uploaded to the VA Connecticut Healthcare System’s public web		Safety Service/GEMS Program Manager	Apr 3, 2017	July 11, 2017	

page

2-2 Comply with public notice requirements for Annual Reports	In progress	<i>Draft Annual report posted on the VA Connecticut Healthcare System's public web page</i>	<i>Publish draft Annual Report public notice annually, provide draft reports to public for review and comment</i>	<i>Public Affairs Officer</i>	Feb 15, 2022	3/28/22
---	-------------	---	---	-------------------------------	--------------	---------

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

SMP implementation progress will be added to the Green Environmental Management System, (GEMS) Committee on a quarterly basis or whenever milestones need to be tracked. THE GEMS Committee is an internal committee dedicated to implementation of the GEMS Management Plan for integrating the environmental footprint into the overall management of the organization.

Planning adding stormwater information to the information CCTV's throughout the facility, and/or screensavers. Post stormwater pollutant information in the Roads & ground Shop.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	(y)	7/11/2017	https://www.connecticut.va.gov/pres/releases/summary.asp
Availability of Annual Report announced to public	(y)	3/28/22	https://www.connecticut.va.gov/pres/releases/summary.asp)

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	IDDE Program Manual Finalized.	Develop written plan of IDDE program containing the required elements.	GEMS Program Manager	Jul 1, 2019	June 28, 2019	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In Progress	Engineering firm retained to aid mapping stormwater structures and adding to the GIS mapping system of the facility	Development of an outfall/interconnection database and map containing the required elements by the third year of the Permit effective date	Facilities Management Services Chief	Jul 1, 2020	March 2020	CCTV of major drainage structures complete. Engineering firm finalizing mapping and identification of outfalls.
3-3 Implement citizen reporting program	Ongoing	The Safety Hotline is available to anybody with a Safety or Environmental concern	Documentation and maintenance of a record of illicit discharge abatement activities including the required elements.	GEMS Program Manager	Jul 1, 2017	Prior to Due date	
3-4 Establish legal authority to prohibit illicit discharges	On going	Institution policies	Establishment of a legal authority or similar mechanism to prohibit illicit discharges.	All employees	Jul 1, 2019	January 1, 2020	
3-5 Develop record keeping system for IDDE tracking	complete	.	Documentation and recording applicable information regarding illicit discharge abatement related activities.	Safety Service/ GEMS Program Manager	Jul 1, 2017	Years prior to 2017	
3-6 Address IDDE in areas with pollutants of concern	In progress		Documentation and recording applicable information regarding addressing IDDE in areas with pollutants of concern	Facilities Management/GEMS Program Manager	Not specified		

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

The written program will be posted to VA Connecticut Healthcare System's intranet webpage; 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
none		

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.

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
--	--	---

No septic systems on site
3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	2
Estimated or actual number of interconnections	7
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	0
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.

IDDEP Program elements, Identification and investigation of IDDE events, and outfall/interconnection screening. Every 3 years.

+

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	On going	Include hydrology analysis in construction design for the project with a foot print exceeding 5000 S.F.	Requirement of developers, construction site operators, or contractors to maintain consistency with the 2002 "Guidelines for Soil Erosion and Sediment Control", as amended, the "Connecticut Stormwater Quality Manual", and all stormwater discharge permits issued by CT DEEP within the West Haven Campus boundary.	FMS Design Engineer	Jul 1, 2020	prior 2017	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	On-going		Establish interdepartmental coordination, where applicable, for site plan review and approval processes.	Facilities Management Services Chief	Jul 1, 2017	Prior to Due Date	Internal NEPA process reviews all projects for environmental impacts
4-3 Review site plans for stormwater quality concerns	ongoing	No new exterior construction projects		Facilities Management Services Chief and GEMS	Jul 1, 2017	2018	

		started in 2019.		<i>Program Manager</i>			
4-4 Conduct site inspections	<i>Ongoing</i>	<i>Periodic inspection on grounds and construction sites</i>	<i>Review and revise, or develop, methods to verify applicable construction projects are compliant with MS4 General Permit requirements through inspection processes. Review and revise, or develop, inspection documentation and recordkeeping methods.</i>	<i>VA Safety & FMS</i>	Jul 1, 2017	2019	
4-5 Implement procedure to allow public comment on site development	<i>On going</i>		<i>Track public notices posted</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2017	<i>Prior to Due Date</i>	<i>If a project needs a NEPA EA or a construction stormwater permit the public will have the opportunity to comment through the legal channels required by the programs</i>
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	<i>On-going</i>		<i>Review and refine as needed, the process designed to notify contractors of potential obligations to obtain CT DEEP Construction General Permit</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2017	<i>Prior to Due Date</i>	<i>Internal NEPA process reviews all projects for environmental impacts</i>

coverage.

- 2017

All projects are reviewed in the design phase to determine if the Construction stormwater general permit criteria are met. Once determined that a Construction General permit is required it is added to the Scope of Work.

Notified Contractor of need to submit for Construction stormwater general permits.

Standardize plan review

Facility Management Service and GEMS Program Manager

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

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	Not started		Review and refine, or develop, procedures to be compliant with MS4 General Permit requirements. Update procedures as	Facilities Management Services Chief	Jul 1, 2022	7-1-2022	

		necessary			
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	<i>On going</i>	<i>Require architect, developers and/or construction site operators of development/redevelopment projects to implement runoff reduction and/or LID measures required by the MS4 General Permit.</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2022	<i>7-1-2022</i>
5-3 Identify retention and detention ponds in priority areas	<i>N/A</i>			Jul 1, 2020	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	<i>Not Started</i>	<i>Develop and implement long term maintenance plans for retention/detention ponds and other stormwater treatment structures located at the West Haven Campus, as applicable</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2020	<i>9-30-2021</i>
5-5 DCIA mapping	<i>Complete</i>	<i>Calculation of the DCIA that contributes stormwater runoff to each MS4 outfall, update calculations as DCIA is added or removed within the facility boundaries</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2020	<i>June 30, 2020</i>
5-6 Address post-construction issues in areas with pollutants of concern	<i>Not started</i>	<i>Evaluate outfall/interconnection screening results and/or observations recorded during maintenance activities. Prioritize and correct identified problems to be consistent with the Retrofit Plan.</i>	<i>Facilities Management Services Chief</i>	Not specified	<i>As needed</i>

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

5.3 Post-Construction Stormwater Management reporting metrics

Metrics

Baseline (2012) Directly Connected Impervious Area (DCIA)	22.11acres
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0 acres total
Retrofits completed	0
DCIA disconnected	0% this year / % total since 2012
Estimated cost of retrofits	\$
Detention or retention ponds identified	0 this year /0 total

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

The following methodology was used to calculate the 2012 (baseline) DCIA:

1. Catchments delineated and inputted into ArcMap as part of previously conducted MS4 mapping activities were used to determine the acreage associated with each area of the campus that discharges to the MS4;
2. Total impervious cover data was obtained from the Connecticut Environmental Conditions Online (CT ECO) 2012 Impervious Surface GIS data layer, which includes buildings, roads, and other impervious surfaces such as sidewalks, driveways, patios, and decks. This data was inputted into ArcMap to provide a preliminary analysis of the overall quantity of impervious surface that existed in each catchment in 2012;
3. An Intersect analysis was conducted in ArcMap using the W&C delineated catchment boundaries overlaid on top of the 2012 Impervious data {mentioned above} to quantify the area of impervious cover within each catchment (IC) that exists within the VA property boundary. Existing impervious areas within catchment boundaries were summed and then converted from square feet to acres;
4. The Percentage of existing impervious cover was calculated from the area results to express what percentage of area of each individual catchment contained impervious surface;
5. The Average Sutherland Equation (“Connecticut Watershed Response Plan for Impervious Cover”, 2015) was used to determine the percent of DCIA for each catchment. The Average Sutherland Equation was used because it most accurately represented campus conditions. This equation assumes mostly storm sewered land cover with curbed and guttered residential rooftops connected to the MS4; and
6. The 2012 existing pervious area, existing impervious area, % impervious cover, DCIA %, and DCIA acres were calculated from this data in ArcMap.

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	On going	MS4 regulatory overview and SWMP training	Continue providing on-the-job training to new and existing employees related to stormwater management topics relevant to operations	Facilities Management Services Chief Gems Program Manager	Jul 1, 2019	March 20 2018	Regulatory overview training given on Dec. 18, 2017 some FMS employees.
6-2 Implement MS4 property and operations maintenance	<i>On going</i>		<i>Develop and/or implement fertilizer application optimization practices; standard operating procedures for handling, storage, and application of fertilizers, pesticides, and herbicides; and establish proper disposal practices for grass clippings to minimize the potential for these materials to enter the MS4; Identify pollutants of concern, petroleum, and non-petroleum products located on West Haven Campus facilities and develop a strategy to evaluate and address proper use,</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2018	<i>9/30/2021</i>	

		<p><i>storage, and disposal; Develop and/or implement procedures for waste management equipment, including dumpsters, and plans to sweep parking lots and facility adjacent areas to minimize pollutant runoff; Implement procedures to minimize or prevent leaf deposition to surfaces or conduits that discharge to the MS4; Verify and document that interior floor drains are not connected to the MS4.</i></p>			
6-3 Implement coordination with interconnected MS4s	<i>Not started</i>	<p><i>Identify and coordinate with operators of interconnected MS4s to identify and reduce contribution of pollutants to the MS4.</i></p>	<i>Facilities Management Services Chief</i>	Not specified	<i>Following mapping</i>
6-4 Develop/implement program to control other sources of pollutants to the MS4	<i>Not started</i>	<p><i>Conduct an annual review of the list stormwater structures and identify non-permitted locations that may be contributing pollutants based on screening and</i></p>		Not specified	

monitoring results

6-5 Evaluate additional measures for discharges to impaired waters*	<i>Not started</i>		<i>Develop, fund (as available), and implement fertilizer management practices and retrofit or source management program to address the contribution of pollutants via stormwater discharge to impaired waters</i>	<i>Facilities Management Services Chief</i>	Not specified	<i>9/30/2020</i>
6-6 Track projects that disconnect DCIA	<i>On going</i>	<i>0.15 Ac. Were disconnected</i>	<i>Develop and implement a procedure to annually track DCIA</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2017	
6-7 Implement infrastructure repair/rehab program	<i>Not started</i>		<i>Develop an infrastructure repair/rehabilitation program to be consistent with the MS4 General Permit requirements. Identification and prioritization of suitable retrofit projects within the MS4</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2021	<i>Jul 1, 2021</i>
6-8 Develop/implement plan to identify/prioritize retrofit projects	<i>Not stated</i>		<i>Identification and prioritization of suitable retrofit</i>	<i>Facilities Management Services Chief</i>	Jul 1, 2020	

projects within the MS4

6-9 Implement retrofit projects to disconnect 2% of DCIA

Jul 1, 2022

6-10 Develop/implement street sweeping program

On going

Implement street sweeping and parking lot sweeping within the West Haven Campus at least once per year during the spring. Document street sweeping results, including dates of sweeping, curb miles swept, volume of material collected, and method of reuse or disposal in Annual Reports

Facilities Management Services Chief

Jul 1, 2018

6-11 Develop/implement catch basin cleaning program

Not started

Update catch basin cleaning program to document current procedures, tabulate volumes for annual reporting in accordance with MS4 General Permit requirements. Review and refine snow and ice management practices; update program as necessary to provide

Jul 1, 2020

Ju 1, 2020

6-12 Develop/implement snow management practices

Completed

Jul 1, 2018

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	yes / 10/2016, 9/2017, 12/18/2017)
Street sweeping	
Curb miles swept	2 miles
Volume (or mass) of material collected	<1 tons
Catch basin cleaning	
Total catch basins in priority areas	0
Total catch basins in MS4	128
Catch basins inspected	0
Catch basins cleaned	0
Volume (or mass) of material removed from all catch basins	0 tons
Volume removed from catch basins to impaired waters (if known)	0 lbs or tons
Snow management	
Type(s) of deicing material used	Solid and liquid salts
Total amount of each deicing material applied	56 tons
Type(s) of deicing equipment used	Spreaders (trucks and hand) lawn

Lane-miles treated	tractor sprayers
Snow disposal location	2 miles
Staff training provided on application methods & equipment	On Site
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	Y / 10/2016, 9/2017
Reduction in application of fertilizers (since start of permit)	lbs or %
Reduction in turf area (since start of permit)	0 acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	4
Cost of mitigation actions/retrofits	\$

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [\[Complete this section for the 2019 Annual Report only\]](#)

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 2019 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.

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?
------------	-------------	---	---------	------------------------------------	---------------------

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
---------	---------------------------------------	---

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, 2021.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
---------	-------------	--------------	---------	------------------------------

Part III: Additional IDDE Program Data [This section required beginning with 2019 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
OF-1	Low Priority	6
OF-2	Low Priority	6
IC-1	Low Priority	9
IC-2	Low Priority	6
IC-3	Low Priority	6
IC-4	Low Priority	9

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
------------------------------	-------------------------	---------	----------	--------------	----------	-------------------------	-------------	------------	----------------------	--------------------------------------

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
DMH-28	8/30/19	None	N/A	N/A	N/A

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

Document Prepared by

Print name: Russell W. Armstead

Print name: Thomas Hemenway

Signature / Date:

Signature / Date: