



## **CITY OF HARTFORD**

### **2023 ANNUAL REPORT**

[January 1, 2023 – December 31, 2023]

# **General Permit for the Discharge of Stormwater from Small Municipal Separate Stormwater Sewer Systems (MS4 General Permit)**

Permit Number GSM-000062

## Executive Summary

This document presents the Stormwater Management Plan (SWMP) Annual Report for the City of Hartford. The SWMP Annual Report was developed to provide a summary of the City's progress towards implementing the best management practices (BMPs) for the six Minimum Control Measures outlined in the SWMP to meet the requirements of the Connecticut Department of Energy & Environmental Protection (DEEP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit) to the maximum extent practicable from January 1, 2023 to December 31, 2023.

The Annual Report includes a written discussion of the status of compliance with the MS4 General Permit, all monitoring data collected and analyzed, and all other information collected and analyzed, and follows the UCONN CLEAR MS4 Annual Report template.

The Annual Report was available for public review for 30 days at the Public Works Department Administrative Offices and on-line at: <https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4>

**MS4 General Permit**  
**City of Hartford 2023 Annual Report**  
 Permit Number GSM-00062  
 January 1, 2023 – December 31, 2023

Primary MS4 Contact: Frank Dellaripa P.E., City Engineer, (860) 757-9975, [Frank.Dellaripa@hartford.gov](mailto:Frank.Dellaripa@hartford.gov)

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This report documents the City of Hartford’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2023 to December 31, 2023.

**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	Maintained the DPW Engineering Stormwater Management webpage that describes the City’s stormwater management efforts, tips on preventative measures for residents, and additional resource links.		On-line	Residents	Post educational information on social media and update stormwater webpage annually	DPW/Frank Dellaripa P.E.	<a href="https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4">https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4</a>
	Hartford 311 posted about preventing illegal dumping and how to report it and promoted neighborhood clean-ups		Social media	Residents			
	Love Hartford Anti-Litter Commercial		YouTube, promoted on Hartford 311	Residents			

1-1 Implement public education and outreach (Continued)	Hartford Green Infrastructure Handbook		On-line	Developers, Residents			<a href="https://circa.uconn.edu/wp-content/uploads/sites/1618/2018/09/Green-Infrastructure-Handbook.pdf">https://circa.uconn.edu/wp-content/uploads/sites/1618/2018/09/Green-Infrastructure-Handbook.pdf</a>
1-2 Address education/outreach for pollutants of concern	The DPW website includes a link to DEEP's Sewage Right-to-Know website concerning combined sewer overflows and sanitary sewer overflows. It also has a link to the MDC Backwater Valve Program		On-line	Residents	One post to social media or info on website addressing Stormwater Pollutants of Concern	DPW/Frank Dellaripa P.E.	<a href="https://www.hartfordct.gov/Government/Departments/Public-Works">https://www.hartfordct.gov/Government/Departments/Public-Works</a>
	The DPW Engineering Stormwater Management webpage includes information on the impacts of pet waste, fertilizer, inflow and infiltration		On-line	Residents			<a href="https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4">https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4</a>
	Hartford's dog registration website has a Dog Owner's Guide that includes information about the requirement of picking up dog waste and that a violation of this ordinance will result in a \$50 fine		On-line	Residents			<a href="https://www.hartfordct.gov/Government/Town-and-City-Clerk/Town-Clerk-Services/Dog-Registration">https://www.hartfordct.gov/Government/Town-and-City-Clerk/Town-Clerk-Services/Dog-Registration</a>
	Trash Talkin' Q&A with Public Works to answer all waste questions and concerns held 5/26/23 at the Dwight Library		In person	Residents			
	MDC website and brochure provides information on their Sewer Backup Prevention Program, Backwater Valve Program, and Private Property Inflow Disconnect Program		On-line	Residents			<a href="https://themdc.org/utility-services/backwater-valve-program/">https://themdc.org/utility-services/backwater-valve-program/</a>  <a href="https://themdc.org/app/uploads/2020/01/Sewer-BackupPrevention-Final-2.pdf">https://themdc.org/app/uploads/2020/01/Sewer-BackupPrevention-Final-2.pdf</a>

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

The DPW will be updating its dedicated stormwater management page under the Engineering Division to include stormwater sensitive “mowing & blowing” techniques to reduce catch basin clogs and the amount of nitrogen and phosphorus infiltrating the stormwater stream. Hartford 311 will post about stormwater sensitive “mowing & blowing” techniques at the start of growing season and proper leaf management at the start of leaf collection. Hartford 311 will also post about properly cleaning up pet waste.

**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 and comply with public notice requirements for Annual Reports (annually by 2/15)	Complete	The City’s SWMP and annual report are publicly available at the DPW Administrative Offices and on-line	All required notices posted by deadline	DPW/Frank Dellaripa P.E.	Notice of public availability posted by 1/9/24, the annual report posted 2/15/24	DPW Admin Offices 50 Jennings Road, Hartford / <a href="https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4">https://www.hartfordct.gov/Government/Departments/Public-Works/Engineering-Division#section-4</a>	
2-2 Stormwater Committee Meetings (annually by 12/31)	Complete	A stormwater Committee Meeting was held 12/7/23	One meeting held annually	DPW/Frank Dellaripa P.E.	12/7/23		
2-3 Sponsor community participation event (annually by 12/31)	Complete	MDC Annual Household Hazardous Waste Collection Event held 10/28/23  Earth Month Volunteer Days for clean-up at Bushnell Park held 4/15/23 & 4/29/23	One event held annually	DPW/Frank Dellaripa P.E.	4/15/23		<a href="https://themdc.org/environment-health-safety/household-hazardous-waste-collection/">https://themdc.org/environment-health-safety/household-hazardous-waste-collection/</a>

<p>2-3 Sponsor community participation event (Continued)</p>		<p>Earth Day Clean Up Bonanza at Pope Park West to clean up streets, park and sidewalks around neighborhoods.</p> <p>Love Hartford Week clean-up at Pope Park, Colt Park, Zion Hills Cemetery and various streets held 10/16/23 to 10/21/23</p> <p>Hartford Cleans Up - KNOX supplies trash bags, litter picks, rakes, and brooms to empower hundreds of volunteers cleaning up Hartford neighborhoods</p> <p>Adopt Your Block – Clean Up Trailer is an anti-litter tool lending library. Neighbors get together, pick a location, set a date and the City brings the tools.</p>					<p><a href="https://www.ctinsider.com/things-to-do/article/earth-day-2023-ct-events-17893547.php">https://www.ctinsider.com/things-to-do/article/earth-day-2023-ct-events-17893547.php</a></p> <p><a href="https://www.hartfordct.gov/Government/Departments/MayorArulampalam/Community-Engagement/CE-Programs/LoveHartford/Love-Hartford-Week">https://www.hartfordct.gov/Government/Departments/MayorArulampalam/Community-Engagement/CE-Programs/LoveHartford/Love-Hartford-Week</a></p> <p><a href="https://knoxhartford.org/knox-programs-and-events/hartford-cleans-up/">https://knoxhartford.org/knox-programs-and-events/hartford-cleans-up/</a></p> <p><a href="https://www.hartfordct.gov/Government/Departments/MayorArulampalam/Community-Engagement/CE-Programs/Trailer">https://www.hartfordct.gov/Government/Departments/MayorArulampalam/Community-Engagement/CE-Programs/Trailer</a></p>
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<p>2-3 Sponsor community participation event (Continued)</p>		<p>Hartford Neighborhood Ambassador Program provides formerly incarcerated residents part-time employment to do litter removal, weed removal, cleanup of high-traffic areas, graffiti identification and other projects on 12 commercial corridors</p> <p>Love Your Block is a mini-grant program that supports residents by funding projects focused on combating litter, activating vacant lots and strengthening neighborhood pride</p>					<p><a href="https://www.hartford.gov/Government/Departments/MayorLukeBronin/Mayor-News/NEIGHBORHOOD-AMBASSADOR">https://www.hartford.gov/Government/Departments/MayorLukeBronin/Mayor-News/NEIGHBORHOOD-AMBASSADOR</a></p> <p><a href="https://www.hartford.gov/Government/Departments/MayorArulampalam/Community-Engagement/CE-Programs/LoveHartford/LYB-Hartford">https://www.hartford.gov/Government/Departments/MayorArulampalam/Community-Engagement/CE-Programs/LoveHartford/LYB-Hartford</a></p>
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**2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.**

The City plans to continue to hold Stormwater Committee Meetings to discuss implementation of the Stormwater Management Plan. Future meetings will include the Department of Development Services, the Office of Sustainability and the MDC (once a Memorandum of Understanding has been approved). The MDC Household Hazardous Waste Collection Event is scheduled for October 26, 2024.

### 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 (Due 7/1/19)	Complete	Written IDDE Program was submitted to the Hartford Court of Common Council for approval. The City Council approved the IDDE plan at their 12/11/23 meeting.	Develop written plan of IDDE program	DPW/Frank Dellaripa P.E.	12/11/23	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/20)	In Progress	The City is working with the MDC to identify MS4 systems vs. combined systems and ownership. The DPW hired a consultant to research DPW's files for system ownership.	Outfall and Interconnections inventory and map completed	DPW/Frank Dellaripa P.E.	Anticipate completing by 7/1/25	A draft separated stormwater system map has been developed by the MDC. The DPW developed a draft map of outfalls and systems owned by the City.
3-3 Implement citizen reporting program (Ongoing)	Ongoing	The "Hartford 311" call center provides a secure way to report, track, and resolve problems or issues residents may have	Formal written program developed	DPW/Frank Dellaripa P.E.	311 System used since prior to 2017 Anticipate improving program by 12/31/24	
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/19)	In Progress	Sections 2N, 2O, and 5 of the MDC Sewer Ordinances address illicit discharges to MDC storm drains in Hartford; Currently under the City of Hartford Municipal Code, Section 17-4 prohibits the discharge of pollutants, contaminants, etc. with fines and penalties for violations but does not specifically address or define illicit discharges.	Ordinance passed by City Council	DPW/Frank Dellaripa P.E.	Anticipate submitting to Court of Common Council by 12/31/24	
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	Ongoing	The Hartford 311 Call Center tracks all reports of illicit discharges	IDDE tracking spreadsheet developed by deadline	DPW/Frank Dellaripa P.E.	IDDE tracking developed by 7/1/17	SSO Inventory is maintained by The MDC. The MDC will be submitting the SSO Inventory directly to the CTDEEP.



3-6 Address IDDE in areas with pollutants of concern	Ongoing	No reports of septic system failures in 2023 (See Section 3.4 below)	Areas with failing septic systems identified by the deadline; % of failing systems addressed annually	DPW/Frank Dellaripa P.E.	9/30/24	The MDC has projects to eliminate CSOs
3-7 Develop and maintain an inventory identifying all known locations where SSOs have discharged to the MS4 within the previous 5 years	Complete	SSOs are managed by the MDC. The MDC has developed and maintains the SSO inventory.	Inventory developed and updated upon occurrence but at least annually and included in the Annual Report	DPW/Frank Dellaripa P.E.	10/27/17	SSO Inventory is maintained by the MDC. The MDC will be submitting the SSO Inventory directly to the CTDEEP.

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

The City anticipates identifying MS4 systems vs. combined systems and determining ownership with the MDC. The city will begin dry weather outfall evaluations for City owned MS4 outfalls in 2024 and will update its ordinance to include illicit discharges.

**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.

**Note: The MDC will be submitting the 2023 SSO Inventory directly to the CTDEEP.**

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)
47 Wolcott Street	5/23/23 & 6/15/23	MS4	Unknown	Suspected dry weather flow	Referred to MDC for investigation	
Collins Street	7/4/23	MS4	Unknown	Sewer backup in street near hospital	Referred to MDC for investigation	
93 Oak Street	8/30/23	MS4	Unknown	Sinking sewer	Referred to MDC for investigation	

**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
The Department of Health and Human Services (HSS) Environmental Health Division regulates septic systems in Hartford. Due to extensive development, the majority of the City is served by the MDC sanitary sewer system. According to the HSS Environmental Health Division, there is a small area where septic systems may exist but exact locations are unknown. HSS Environmental Health Division did not receive any reports of failed septic systems in 2023.				

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

After a citizen reports a concern to the Hartford 311, it is issued a case number and is logged into an advanced tracking system that allows the appropriate department to take ownership and respond appropriately. The status of the concern can be checked by the case number. The Hartford Office of Community Engagement tracks the 311 calls and the Department of Public Works is responsible for tracking responses to those reports.
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### 3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	Unknown
Estimated or actual number of interconnections	Unknown
Outfall mapping complete	0%
Interconnection mapping complete	0%
System-wide mapping complete (detailed MS4 infrastructure)	0%
Outfall assessment and priority ranking	0%
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0%

### 3.7 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).

Illicit discharge identification and reporting training is given to DPW operations staff during annual environmental training. Staff are trained to identify illicit discharges and what the exceptions are, and who to report an illicit discharge to upon discovery.

## 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
4-1a Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit (Due 7/1/20)	Ongoing	The City has established and implemented land use regulations to control construction site runoff in Section 6.14 (Stormwater & Low Impact Development) and 6.16.3 (Soil Erosion & Sediment Control) of the Zoning Regulations.	Existing E&S control and stormwater regulations reviewed and revised as necessary by deadline	Department of Development Services/Randal Davis, Interim Director	Anticipate completion 12/31/24	The City's LID regulations incorporate by reference the Connecticut Stormwater Quality Manual to improve the quality of stormwater runoff from a site. Section 6.14 last revised 12/13/22
4-1b Establish interagency or inter-jurisdictional agreements (Ongoing)	In progress	<p>The City is in negotiations with the MDC to determine infrastructure ownership</p> <p>The Town of West Hartford notified the City of ten locations where the Town's storm drainage system interconnects. It has not been determined if they are interconnected to the City's drainage system or the MDC's drainage system.</p>	Interagency or inter-jurisdictional agreements established by deadline	DPW/Frank Dellaripa P.E.	Ongoing	Potentially interconnected MS4s that have been tentatively identified include the MDC, West Hartford, Bloomfield, Newington, various state properties and CTDOT
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	Complete	The City has implemented interdepartmental coordination in site plan review and approval	Plan developed and implemented by deadline	Department of Development Services/Randal Davis, Interim Director	Before 7/1/17	

4-3 Review site plans for stormwater quality concerns (Ongoing)	Ongoing	Site plans were reviewed for stormwater quality concerns	100% of site plans received are reviewed prior to approval for E&S control to prevent or minimize impacts to water quality	Department of Development Services/Randal Davis, Interim Director	Ongoing	
4-4 Conduct site inspections (Ongoing)	Ongoing	DPW is waiting for confirmation from DDS that site inspections were conducted	Formal inspection checklist reviewed/ revised as necessary by deadline, 100% of site inspections conducted for all sites constructed within reporting period, and percent of resolutions achieved after discovery of deficiency	Department of Development Services/Randal Davis, Interim Director	Ongoing	
4-5 Implement procedure to allow public comment on site development (Ongoing)	Ongoing	Currently any project requiring approval by a land use agency or commission is presented at a public meeting.	Public meetings held by Planning, Zoning and Inland Wetlands Agency for 100% of eligible projects; 100% of projects posted on City website when not presented at a meeting	Department of Development Services/Randal Davis, Interim Director	Ongoing	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit (Ongoing)	Ongoing	The City notifies Contractors and developers that they must submit a registration Stormwater Construction General Permit when the City holds a preconstruction meeting or reviews an application	Flyers provided in 100% of preconstruction meetings and land use application reviews	Department of Development Services/Randal Davis, Interim Director	Ongoing	

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

DPW will review land use regulations in the context of the General Permit Part 6.a.4.A.i.d to determine additional language that will strengthen and clarify the requirements of property owners for a long-term maintenance plan and schedule

## 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 (Due 7/1/22)	Ongoing	The City has established and implemented land use regulations regarding Low Impact Development and runoff reduction in site planning per Section 6.14 (Stormwater & Low Impact Development) last revised 12/13/22. Other sections of the City's Zoning Regulations include guidelines for the elimination of minimum parking requirements, significant reduction in impervious surface is through the requirements for the design of new surface parking areas and existing parking areas that are subject to modification or improvement (Sections 6.10 and 7.3), and standards that incorporate strong protections for existing trees (Section 6.4.1).	1) Legal authority established for LID and runoff reduction practices; 2) Identification and, where appropriate, reduction or elimination of existing local regulatory barriers to implementing LID and runoff practices; and 3) Consideration of the watershed protection elements to manage the impacts of stormwater on receiving waters implemented	Department of Development Services/Randal Davis, Interim Director	12/31/24	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	Complete	"stormwater fee in lieu" provision in the zoning code	Percent of Water Quality Volume retained	Department of Development Services/Randal Davis, Interim Director	7/1/19	Fee requires developers to manage 1 <sup>st</sup> inch of rainwater on their properties or pay into a fund –received first payment into fund in 2018

5-3a Identify retention and detention ponds in priority areas (Due 7/1/20)	Not started		Identify City-owned retention and detention ponds in priority areas	DPW/Frank Dellaripa P.E.	Anticipate completion 10/31/24	
5-3b Implement long-term maintenance plan for stormwater basins and treatment structures (Ongoing)	Not started		Inspect 100% of City-owned stormwater basins and treatment structures annually	DPW/Frank Dellaripa P.E.	Anticipate completion 7/1/25	
5-4 DCIA mapping (Due 7/1/20)	In progress	The DPW GIS division created an impervious surface map	Calculate DCIA for all outfalls	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	<a href="https://hartfordclimate.files.wordpress.com/2016/12/map-gis-nrz_impervious_surface.pdf">https://hartfordclimate.files.wordpress.com/2016/12/map-gis-nrz_impervious_surface.pdf</a>
5-5 Address post-construction issues in areas with pollutants of concern	Not started		Plan for correcting problems identified under BMP 5-3b developed within 12 months of identification; 100 % of identified problems corrected within required timeframe	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	
5-6 Implement and maintain any control measures or conditions for New Discharge to an Impaired Water without an Established TMDL	Not started		100% of control measures or conditions implemented and maintained	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	

5-7 Additional requirements for all new and existing discharges to a water with an Established TMDL or with a Pollutant Load Reduction	Not started		100% of the discharge requirements consistent with the applicable Wasteload Allocations, Load Allocations or Water Quality Targets for that TMDL followed for new authorized discharges to a water with a TMDL or with a pollutant load reduction established within the TMDL	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	
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**5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.**

The City will conduct a final review of Hartford’s LID regulations located in several sections of the Zoning Regulations to determine if any minor adjustments are necessary.

**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)	5,287.4 acres
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0 acres total
Retrofit projects completed	0
DCIA disconnected	0% this year / 0% total since 2012
Estimated cost of retrofits	\$0
Detention or retention ponds identified	0 this year /0 total

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

DCIA taken from UCONN CLEAR MS4 mapping data for total impervious cover without taking into account potentially disconnected areas



## 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)	Ongoing	Environmental Training provided to all DPW operations divisions at least quarterly to ensure all employees receive annual training	100% of required operational employees trained annually	DPW/Frank Dellaripa P.E.	3/21/23 6/21/23 8/15/23 10/18/23 12/8/23	174 of 185 (94%) operational employees trained in 2023 for Industrial and MS4 stormwater permits, IDDE, and spill prevention and response  Proper management of grass clippings for MS4 compliance training presented to Blight Remediation Team and Parks Division on 9/27/23 (40 attendees). Training information also added to annual environmental training.
6-2a Minimize the discharge of pollutants to MS4 from parks and open space management (Ongoing)	Ongoing	"Low mow zones" at Keney, Goodwin, Pope, Colt, Elizabeth and Brackett Parks	100% of existing SOP's reviewed and updated by deadline.	DPW/Frank Dellaripa P.E.	Ongoing	Low mow zones are planted with meadow plants instead of traditional turf  See Additional Details for BMP 6-1 above for Proper management of grass clippings for MS4 compliance training
6-2b Minimize the discharge of pollutants to MS4 from pet waste (Ongoing)	In Progress	The City's website for dog registration includes a User's Guide  Colt Park has seven dog waste stations available for the public to clean up after their dogs	1) Locations with inappropriate pet waste management identified; and 2) % of locations where compliance activities are complete.	DPW/Frank Dellaripa P.E.	Ongoing	User's Guide informs the public that picking up of dog feces is required at all times and violation of this municipal ordinance will result in a \$50 fine <a href="https://www.hartfordct.gov/Government/Town-and-City-Clerk/Town-Clerk-Services/Dog-Registration">https://www.hartfordct.gov/Government/ Town-and-City-Clerk/Town-Clerk- Services/Dog-Registration</a>

6-2c Minimize the discharge of pollutants to MS4 from waterfowl (Ongoing)	In Progress	Hartford Parks prohibit feeding of waterfowl	1) Lands where waterfowl congregate identified; 2) % of identified lands that have signs installed or other targeted techniques to educate public and discourage feeding; 3) % of identified lands that have practices implemented to prevent congregation and/or the areas of direct drainage isolated	DPW/Frank Dellaripa P.E.	Ongoing	
6-2d Minimize the discharge of pollutants to MS4 from buildings & facilities (Ongoing)	In progress	All parking lots swept annually as per Street Sweeping SOPs.  City conducted an inventory of all City owned properties for environmental issues.	1) Procedures developed and implemented for dumpsters; 2) Parking lots swept annually; 3) Non-SWPPP facilities evaluated to ensure no interior floor drains connect to the MS4	DPW/Frank Dellaripa P.E.	Ongoing	The City has a SWPPP Plan for the DPW Yard and the DEEP has a SWPPP Plan for the Municipal Transfer Station & closed landfill. The City has SPCC plans for 10 City-owned facilities.
6-2e Minimize the discharge of pollutants to MS4 from municipal vehicle and equipment maintenance (Ongoing)	Ongoing	All vehicles are washed in designated areas at the DPW garage where wash water is directed to an oil/water separator and then the sanitary sewer system	1) Procedures established for Town vehicle storage; 2) Procedures established to ensure that vehicle wash waters are not discharged to the MS4 or to surface waters.	DPW/Frank Dellaripa P.E.	Ongoing	
6-2f Minimize the discharge of pollutants to MS4 from leaf management (Ongoing)	Ongoing	The City has a Leaf Collection Program where leaves are collected city-wide in the fall and spring, leaves are collected year round at transfer station and brought to a compost facility, Streets are swept in the fall	Problem streets swept annually in the fall as part of BMP #6-9; Educational information provided on the City website	DPW/Frank Dellaripa P.E.	Ongoing	<a href="https://www.hartfordct.gov/Government/Departments/Public-Works/DPW-Services/Leaf-Collection">https://www.hartfordct.gov/Government/Departments/Public-Works/DPW-Services/Leaf-Collection</a>  Christmas tree collection 1/9/23 to 2/24/23  Spring Yard Waste Collection 5/15/23 to 5/26/23  Fall Leaf Collection 11/5/23 to 12/24/23

6-3 Implement coordination with interconnected MS4s	In Progress	The City is in the process of developing a MOU with the MDC	Interconnected MS4 coordination implemented	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	DOT is not entering into agreements with municipalities but is sharing IDDE results in excess of permit triggers with the affected municipality. The Town of West Hartford has provided a point of contact.
6-4 Develop/implement program to control other sources of pollutants to the MS4	In Progress	City used a contractor for maintenance and debris cleanup efforts  MDC North Branch Park River Drainage Study – see Additional Details	Program developed and implemented to control the contribution of pollutants to MS4 by deadline	DPW/Frank Dellaripa P.E.	Ongoing  Started in April 2023 and completion expected in late spring 2024	3/23: Removed debris, trash and woody debris from North Branch of the Park River near #61 Woodland Street 5/23: Removed debris from large diameter culvert carrying unnamed tributary from Town of Bloomfield which connects to the North Branch Park River 11/23: Removed debris from the trash rack at the North Branch Park River inlet to the Park River Conduit 12/23 to 1/24: debris, trash, and forest litter removed from approximately 1,000 LF of the Cemetery Brook upstream of Chandler Street  MDC consultant used flow metering and data collection to initiate and perform the work associated with the drainage study and future sewer separation projects
6-5 Evaluate additional measures for discharges to impaired waters	Ongoing	See Activities in Current Reporting Period for BMP 6-4 above	Additional measures implemented	DPW/Frank Dellaripa P.E.	Ongoing	See Additional Details for BMP 6-4 above for contractor cleanups during 3/23, 5/23, & 11/23 and the North Branch Park River Drainage Study
6-6 Track projects that disconnect DCIA (Ongoing)	In progress	The Office of Sustainability had previously tracked green infrastructure projects but the information is no longer available	The total amount of DCIA that has been disconnected during a given year	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	

6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	Not Started		Program developed and implemented by deadline	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	
6-8a Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)	Not Started		Plan developed by deadline	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	
6-8b Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	Not Started		2% DCIA disconnected by deadline	DPW/Frank Dellaripa P.E.	Anticipate completion 12/31/24	
6-9 Develop/implement street sweeping program (Ongoing)	Complete	The City developed SOPs for Street Sweeping and completed annual sweeping goals	Sweep all residential roadways twice/year, sweep City-owned parking facilities once annually	DPW/Frank Dellaripa P.E.	By 7/1/17	The City purchased a new street sweeper for \$338,360. The 2024 Elgin Broom Bear has mechanical brooms and a pavement pre-wetting system. It was put into service 11/14/23.  188.31 tons of street sweepings were collected this year.
6-10 Develop/implement catch basin cleaning program (Ongoing)	Ongoing	The MDC manages catch basin cleaning within the City	100% of catch basins cleaned within schedule	DPW/Frank Dellaripa P.E.	Ongoing	
6-11 Develop/implement snow management practices (Due 7/1/18)	Ongoing	The City followed standard operating procedures for snow management practices and all employees received on-the-job training on equipment	1) SOPs implemented and refined, 2) Percent of operational staff trained on application methods and equipment; and 3) optimization goals for sand and/or chemical application rates met annually	DPW/Frank Dellaripa P.E.	Ongoing	Service vendor re-calibrates electronic spreaders annually, all conveyer settings are set to the proper calibration rate for optimal levels according to the manufacturer's instructions (average 300 pounds per lane mile); prior to each storm, the truck gate opening is checked to ensure even flow of material by making sure both sides of the reflective tape are lined up (2" opening)

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

The DPW will work with DDS and Office of Sustainability to track projects that disconnect DCIA, implement infrastructure repair/rehab program, and develop a plan to identify/prioritize retrofit projects and disconnect DCIA. The City will provide outreach to commercial stormwater permittees to ensure they are sweeping paved areas and cleaning catch basins. In 2024, a cleaning crew will be assigned to follow behind trash collection to clean off catch basin tops when cars are not allowed to be parked on the street. The City will utilize a contractor to clean City-owned catch basins.

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

Metrics	
Employee training provided for key staff	yes / 3/21/23, 6/21/23, 8/15/23, 10/18/23 & 12/8/23
Street sweeping	
Curb miles swept	10,355.5 miles
Volume (or mass) of material collected	188.31 tons
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	The MDC will provide catch basin cleaning metrics directly to CTDEEP
Total catch basins town- (or institution-) wide	
Catch basins inspected	
Catch basins cleaned	
Volume (or mass) of material removed from all catch basins	
Volume removed from catch basins to impaired waters (if known)	
Snow management	
Type(s) of deicing material used	Morton Blizzard Wizard & Morton Safe-T-Salt
Total amount of each deicing material applied	4,333 tons Morton Blizzard Wizard 1,003 tons Morton Safe-T-Salt
Type(s) of deicing equipment used	Fleet of 6 & 10 wheel trucks w/ speed control; various smaller plow vehicles w/o speed control; some storms various sanitation vehicles are outfitted w/ plows
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	217.7 miles
Snow disposal location	City Parking Lots located at #63 & #80 New Road
Staff training provided on application methods & equipment	Yes / On-the-job training provided
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	Not tracked
Reduction in turf area (since start of permit)	Not tracked
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	Not tracked

#### 6.4 Catch basin cleaning program

**Provide any updates or modifications to your catch basin cleaning program.**

The MDC manages catch basin cleaning within the City of Hartford. The MDC will be submitting their information directly to the CTDEEP for 2023.

#### 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)**

Retrofit program not started.

**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)**

Retrofit program not started.

## 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 MDC will be reporting any outfall screening conducted in 2023 directly to the CTDEEP.

In 2020, MDC performed screening at 14 stormwater outfalls that discharge to impaired waters (Outfall ID #s 29 to 46 shown in section 2.1 below). Of the 14 outfalls, 10 outfalls measured E-Coli above the limit identified in Section 6(i)(1)(B) of the General Permit. The MDC had previously conducted screening of 27 outfalls that discharge to impaired waters in 2018 & 2019. This completes the screening for the MDC outfalls.

The City is working with the MDC to identify MS4 systems vs. combined systems and ownership prior to any follow-up investigations.

## 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](http://www.nemo.uconn.edu/ms4/tasks/monitoring.htm). Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

MDC no longer provides the data to the City and the City assumes the data is reported directly to DEEP.

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	E-Coli Results col/100 ml	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"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>
Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
TOW #M1-214002	<p>The COH forwarded a letter to the MDC that was prepared by the Town of Wethersfield (TOW) dated May 20, 2020 that had identified elevated bacteria of 24,200 col/100ml at TOW #M1-214002 located to the east of the intersection of Silas Deane Highway and Hartford Avenue near the Hartford city line. The TOW screening sample was taken on December 21, 2018 during a 2.3" + rain event equivalent to a 1-year storm. As a result of the storm event, the MDC Franklin Avenue Combined Sewer Overflow (CSO) regulators were activated due to the size of the storm, which discharge to the 72" Franklin Avenue Storm Drain, that required MDC to open the DEEP permitted CSO regulator F-5 which discharges to the Wethersfield outfall #M1-214002.</p> <p>MDC performed a follow up dry weather sampling event at the Wethersfield outfall #M1-214002 on August 24, 2020. Prior to sampling MDC visually confirmed that CSO regulator F-5 had no flow and was closed. It was identified that there was a significant flow at the Wethersfield outfall during sampling. The outfall sample results measured fecal coliform at &gt;2,420 mpn/100ml. The source of the elevated bacteria is unknown.</p>	MDC suggests that additional investigation is performed in conjunction with the TOW and COH to identify the source of bacteria.

MDC no longer provides the data to the City and the City assumes the data is reported directly to DEEP.

### 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, 2021.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)



### Part III: Additional IDDE Program Data

The IDDE Program was not started in 2022. The City is working with the MDC to identify MS4 systems vs. combined systems and ownership.

#### 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

#### 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.

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

**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.

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

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

For details on this requirement, visit [www.nemo.uconn.edu/ms4/tasks/monitoring.htm](http://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

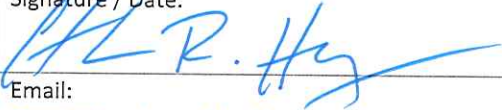

**You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

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

<p>"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."</p>	
Duly Authorized Representative	Document Prepared by
Print name: Christopher Hayes	Print name: Kristin Doundoulakis
Signature / Date:  3/26/24	Signature / Date:  / March 26, 2024
Email: <a href="mailto:Christopher.Hayes@hartford.gov">Christopher.Hayes@hartford.gov</a>	Email: <a href="mailto:Kristin@Atlas-Environmental.com">Kristin@Atlas-Environmental.com</a>