MS4 General Permit MacDougall Correctional Institution 2023 Annual Report GSM000125 January 1, 2023 – December 31, 2023

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This report documents the MacDougall Correctional Institution 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.

Progress in 2023 was limited by the requirements of a Memorandum of Agreement between the Department of Correction (CTDOC) and the University of Connecticut Microbial Analysis, Resources, and Services (UCONN). Under the Agreement UCONN had established that a SARS Co-V2 wastewater monitoring and testing program was useful for finding the beginnings of an outbreak as well as monitoring how well infected individuals were identified. CTDOC was interested in having UCONN test CTDOC facilities wastewater for SARS Co-V2 and Influenza A concentrations as a means to assist in detecting the beginnings of a COVID/Influenza A outbreak. This did impact our ability to make progress on certain items listed as in progress or on-going. Despite the SARS Co-V2 wastewater testing, there is progress to report. Notable accomplishments include continuation of staff training programs, documentation of a street sweeping program, and development of a Preventative Maintenance catch basin cleaning program.

Part I: Summary of Minimum Control Measure Activities

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

| вмр | 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 | Not started/on- going | | Develop/acquire materials One message per year and topic area | CT DOC Facilities Management and Engineering | Jul 1, 2019 | | UConn website EPA Stormwater Outreach Tool Box Rhode Island Stormwater Solutions |

1.1 BMP Summary

| 1-2 Address | NA | NA | | | No Direct Discharges to |
|---------------------|----|----|--|--|-------------------------|
| education/ outreach | | | | | Impaired Waters |
| for pollutants of | | | | | |
| concern . | | | | | |

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

CT DOC will acquire educational materials to be used during the permit term from available sources such as CTDEEP, NEMO, EPA, COG. Materials will be posted, distributed, or otherwise disseminated in a manner to reach all staff and inmates.

1.3 Details of activities implemented to educate the community on stormwater

CT DOC will acquire educational materials to be used during the permit term from available sources such as CTDEEP, NEMO, EPA, COG. Materials will be posted, distributed, or otherwise disseminated in a manner to reach all staff and inmates.

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 the tails |
|---|----------|--|---------------------------------------|--|-----------------|---|----------------------|
| 2-1 Comply with public notice requirements for the Stormwater Management Plan | Complete | Public notice posted on internet web page | Public notice for SMP | CT DOC Facilities Management and Engineering | Ongoing | Apr 3, 2017 | |
| 2-2 Comply with public notice requirements for Annual Reports | Complete | Public notice posted on internet web page | Public notice for Annual Report | CT DOC Facilities Management and Engineering | Feb 15, 2019 | Feb 15, 2020 Draft April 1, 2020 Final | |

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

Continue to make the SMP available on-line and at a location for public review. Continue to make the annual report available on-line and at a location for public review. Continue to comply with Annual Report public notice requirements.

2.3 Public Involvement/Participation reporting metrics

| Metrics | Implemented | Date | Posteds - |
|--|-------------|--------|---|
| Availability of the Stormwater Management Plan announced to public | Y | 4/3/17 | 24 Wolcott Hill Rd, Wethersfield <u>http://www.ct.gov/</u> <u>doc/cwp/view.asp?</u> a=1502&Q=591480 |
| Availability of Annual Report announced to public | Y | 4/1/20 | 24 Wolcott Hill Rd, Wethersfield http://www.ct.gov/ doc/cwp/view.asp? a=1502&Q=591480 |

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 completedior projected completion date | - Californ poletalls |
|--------------|----------|--|--------------------|----------------------------------|--------|---|----------------------|
| 3-1 Develop | Complete | GZA has prepared a comprehensive written | Written | CT DOC Facilities | Jul 1, | 6/8/18 | Template posted on |
| written IDDE | | Illicit Discharge Detection and Elimination | IDDE | Management and | 2019 | | UConn website |
| program | | (IDDE) Program applicable | Program | Engineering | | | |
| | | to the locations and areas classified as Priority | | | | | |
| | | Areas in the SMP. The written IDDE Program | | | | | |
| | | will include procedures and schedules for | | | | | |
| | | development and implementation of the | | | | | |
| | | following components: | | | | | |
| | | Legal Authority to prohibit and eliminate | | | | | |
| | | illicit discharges | · · | | | | |
| | | Statement of IDDE Program Responsibilities | | | | | |

| 3-2 Develop list and maps of all MS4 | Complete | Assessment and Priority Ranking of Catchments Outfall and Interconnection Screening and Sampling Sample collection, use of field kits, storage/conveyance of samples, hold times, etc. Develop a schedule and parameters for outfall and interconnection screening and sampling to begin 10/1/19 Develop a schedule and parameters for dry weather screening and sampling of every outfall and interconnection over the five-year permit term Catchment Investigations IDDE/SSO Removal and Confirmation Follow-up Screening Illicit Discharge Prevention Procedures GZA has developed a comprehensive list (in Microsoft Excel format) and maps (min 1"=2000', max | List and Maps of Outfalls | CT DOC Facilities Management and Engineering | Jul 1, 2020 | 12/29/17 | |
|---|----------|---|---------------------------------|--|----------------|----------|--|
| stormwater outfalls in priority areas | | 1"=100') of stormwater discharge (outfall) locations and interconnections utilizing available DOC facility drainage maps. Maps which are available in paper only (Bridgeport, Carl Robinson, MacDougall, and Osborn) will be scanned by GZA and locations of outfalls and interconnections digitized using ArcGIS. Latitude/longitude will be identified using ArcGIS. The maps and listing include the following information: Type, material, size, and location (latitude and longitude) of conveyance, outfall, or channelized flow, Name, water body ID and Surface Water Quality Classification of the immediate surface water body or wetland to which the outfall eventually discharges, If the outfall does not discharge directly to a named water body, the name and water body ID of the nearest named water body to which the outfall eventually discharges, and | | | | | |

| | | The name of the watershed, including the sub regional drainage basin number in which the discharge is located. Building upon the list and mapping GZA will conduct field investigations to confirm outfall and interconnection locations identified on the available mapping, and to potentially identify outfall locations not previously mapped. To the extent practical, the outfall mapping investigations will be performed in parallel with field screening investigations of each outfall and interconnection to confirm/identify the following information: Unique identifier, Receiving water, Outfall type, Date of most recent inspection, Dimensions/size, Shape, Material, Spatial location (latitude, longitude), Physical condition, and Indicators of potential non-stormwater discharges. | | | | |
|---|-------------|---|---|--|----------------|--|
| 3-3 Implement citizen reporting program | In progress | The Citizen Reporting Program has been outlined in the IDDE Plan prepared by GZA. Started development of procedure | Posting of program information, Number of reports, illicit discharges identified and corrected | CT DOC Facilities Management and Engineering | Jul 1, 2019 | Website, email, phone number |
| 3-4 Establish legal authority to prohibit illicit discharges | In progress | Establishing Legal Authority has been outlined in the IDDE Plan prepared by GZA. Started development of procedure | Establish written procedures | CT DOC Facilities Management and Engineering | Jul 1, 2019 | Checklist and sample ordinance posted on UConn website |
| 3-5 Develop record keeping system for IDDE tracking | In progress | The IDDE Tracking Recordkeeping System has been outlined in the IDDE Plan prepared by GZA. Started development of procedure | Number of illicit discharges removed | CT DOC Facilities Management and Engineering | Jul 1, 2019 | |

| 3-6 Address | NA | NA | | Not | | |
|-----------------|----|----|--|-----------|--|--|
| IDDE in areas | | | | specified | | |
| with pollutants | | | | | | |
| of concern | | | | | | |
| | | | | | | |

Extra space for describing above BMP activities, if needed:

| BMP | |
|----------|--|
| 3-1, 3-4 | The IDDE Program is designed to provide the legal authority to prohibit and eliminate illicit discharges and sanitary sewer overflows to the MS4; find |
| | the source of any illicit discharges; eliminate those illicit discharges; and ensure ongoing screening and tracking to prevent and/or eliminate future |
| | illicit discharges. The DOC MS4 is limited to DOC properties. As such, DOC has full authority to prohibit, investigate, and remove illicit discharges from |
| | its MS4 properties, and to enforce its own policy. Therefore, separate legal authority is not required. |

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

| Finalize citizen reporting program. | |
|-------------------------------------|---|
| Finalize legal authority. | |
| Finalize record keeping system. | . |
| | |
| | |

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

| Date of Report | Location / suspected source | Response taken: | |
|----------------|-----------------------------|-----------------|--|
| NA | NA | NA | |
| | | - | |

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 | Date and duration of occurrence | Discharge to MS4 or surface water | volume | Known or suspected cause / Responsible | Construction of the second second states | is planned and comp | leted (include. | Sampling data (Itapplicable) |
|--|---------------------------------------|---|--------|--|--|---------------------|-----------------|---------------------------------|
| receiving water) | None Reported | | | party | | | | |
| None Reported | None Reported | | | | | | | |

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

As part of the comprehensive, Final IDDE Plan prepared by GZA, we will develop a spreadsheet-based system for maintaining records of illicit discharge abatement activities.

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. It known |
|---|---|---|
| ΝΑ | | |

3.7 IDDE reporting metrics

| Metrics | |
|--|---|
| Estimated or actual number of MS4 outfalls | 7 |
| Estimated or actual number of interconnections | 0 |
| 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 | 7 |
| Catchment investigations complete | Planned for 2025 (high priority), 2026 (low priority) |
| Estimated percentage of MS4 catchment area investigated | Planned for 2025 (high priority), 2026 (low priority) |

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

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Annual IDDE training is available to all employees. The training has been incorporated into the on-line Waste Materials and Spill Reporting and Handling, Storage and Disposal of Waste Materials training programs.

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 decails |
|--|----------------|--|---|--|----------------|---|--------------------|
| 4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit | In progress | Requirements for implementation have been outlined in the SMP prepared by GZA Started development of procedure | Establish written procedures | CT DOC Facilities Management and Engineering | Jul 1, 2020 | | |
| 4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval | In progress | Requirements for implementation have been outlined in the SMP prepared by GZA Started development of procedure | Written interdepartmental coordination procedures | CT DOC Facilities Management and Engineering | Jul 1, 2017 | | |
| 4-3 Review site plans for stormwater quality concerns | Complete | No site plan reviews during report year | Number of site plan reviews Procedure developed | CT DOC Facilities Management and Engineering | Jul 1, 2017 | 12/31/17 | |
| 4-4 Conduct site inspections | Complete | No construction developments during the report year | Number of site inspections Procedure/Checklist developed | CT DOC Facilities Management and Engineering | Jul 1, 2017 | 12/31/17 | |
| 4-5 Implement procedure to allow public comment on site development | NA | DOC operations are located entirely on state property. As such, DOC will follow the public comment requirements of State Statutes and | | | | | - |

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| | | DEEP permits and regulations. Information submitted by the public with regard to proposed/ongoing site development/disturbance activities will be considered. | | | | | |
|---|----------------|--|---|--|----------------|--|--------|
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit | In progress | No construction or site development projects during the report year | Established policy Number of projects CGP | CT DOC Facilities Management and Engineering | Jul 1, 2017 | | • • |

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

Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit. Finalize procedure for interdepartmental coordination in site plan review and approval. Using Town of Tolland State Permit Notification as a model, finalize a procedure to notify developers about DEEP construction stormwater permit.

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 | • Dae | Date-completed or, projected completion date | Attimonal defails |
|--------------------------------|---------|---|--------------------|---------------------------------------|--------|--|--------------------------|
| | Not | Began to gather | Establish | CT DOC Facilities | | | As the CT DOC MS4 is |
| | started | available guidance | written | Management | | | limited to CT DOC |
| | | documents from DEEPs | protocols | and Engineering | | | property, CT DOC already |
| | | website: CT Guidelines | Number of | | | | has full authority to |
| | | for Soil Erosion and | project | | | | control development |
| *5-1 Establish and/or update | | Sediment Control. | reviewed | | | | procedures and |
| legal authority and guidelines | | Technical | | | Jul 1, | | implement the use of |
| regarding LID and runoff | | Memorandum 4, LID | | | 2022 | | "Low Impact |
| reduction in site development | | Guidelines and | | | 2022 | | Development" (LID) and |
| planning | | Standards (Fuss & | | | | | runoff reduction site |
| | | O'Neill 2010). LID | | | | | planning and |
| | | Appendix to CT | | | | | development practices, |
| | | Guidelines for Soil | | | | | provided all such |
| | | Erosion and Sediment | | | | | development and |
| | | Control (Fuss & O'Neill | | | | | redevelopment is |

| | | 2011). LID Appendix to the CT Stormwater Quality Manual (Fuss & O'Neill 2011). | | | | | planned, designed, and constructed in accordance with other applicable regulatory requirements and to meet public safety and security needs. |
|---|----------|--|--|--|----------------|----------|--|
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects | | NA See MCM 5-1 | - | | Jul 1, 2022 | | |
| 5-3 Identify retention and detention ponds in priority areas | Complete | Retention and detention ponds were identified by GZA through field investigations and system mapping | Retention and detention ponds identified through field investigations and system mapping | CT DOC Facilities Management and Engineering | Jul 1, 2020 | 12/29/17 | |
| 5-4 Implement long-term maintenance plan for stormwater basins and treatment structures | Complete | GZA has developed long term maintenance plans for ensuring the effectiveness of retention or detention ponds and applicable stormwater treatment structures or measures that are located within Priority Areas | Establish written long- term maintenance plans and begin implementation. Track annual inspections including structures inspected, date, inspection results, and maintenance performed. | CT DOC Facilities Management and Engineering | Jul 1, 2020 | 4/5/18 | |
| 5-5 DCIA calculations | Complete | Established written methodology in SMP and performed initial DCIA calculations | Established written methodology in SMP and performed initial DCIA calculations. | CT DOC Facilities Management and Engineering | Jul 1, 2020 | 12/15/17 | · · |

| | NA | | | |
|--|----|--|------------------|--|
| 5-6 Address post-construction issues in areas with pollutants of concern | | | Not specified | |

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

Currently there is no construction occurring on site and no plan of construction in the future.

5.3 Post-Construction Stormwater Management reporting metrics

| Metrics | |
|---|---------------------|
| Baseline (2017) Directly Connected Impervious Area (DCIA) | 7.15 acres |
| DCIA disconnected (redevelopment plus retrofits) | * |
| Retrofits completed | Covered under MCM 6 |
| DCIA disconnected | * |
| Estimated cost of retrofits | Covered under MCM 6 |
| Detention or retention ponds identified | 2 |

*CT DOC has had discussions with CT DEEP regarding specific BMPs within this MCM and discussed unacceptable safety and security risks which could arise from compliance with several of the BMPs identified namely, the following:

- Legal Authority/Guidelines for LID/Runoff Reduction;
- Enforce LID/runoff reduction requirements for development and redevelopment projects;
- The requirement to specify minimal dimensional criteria for creation of roadways, parking lots, and other impervious cover and minimize impervious areas;
- The requirements for disconnection of impervious surfaces, specifically goals for disconnection of impervious surfaces.

Certain BMPs and measurable goals may not be met by CT DOC based on agreed upon elements previously discussed with CT DEEP and the safety and security of the facilities.

Due to the security of the facilities and safety of the public, the retrofit program and goals to disconnect existing DCIA through retrofit and redevelopment projects will be difficult to implement. Retrofit and redevelopment projects and goals to modify existing developed sites will not be possible for DOC. To the extent possible, new development/redevelopment will consider DCIA. CT DOC and CT DEEP have previously discussed this BMP and agreed that due to requirements for public safety and security, there are development/redevelopment/retrofit limitations, because of the requirement to have specific pavement areas associated with these correctional facilities. As such, opportunities for DCIA disconnection will be limited at the six facilities which comprise CT DOC's MS4. To the extent possible, new development/redevelopment areas associated with these correctional facilities. As such, opportunities for DCIA disconnection will be limited at the six facilities which comprise CT DOC's MS4. To the extent possible, new development/redevelopment will consider DCIA.

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

CT DOC intends to use the methodology and criteria provided by CT DEEP for its preliminary calculations, which will be completed by July 1, 2020. The Impervious Surface Analysis Tool (ISAT), which is a Geographic Information System (GIS) extension, will be used to estimate impervious surface area using land cover and coefficients which are tied to the land cover dataset. The coefficients will be used with the Connecticut Land Cover 2002 data available online. The tool is used to calculate the percent of impervious surface area of a selected geographic area (in this case, on a catchment basis). ISAT was developed by NEMO (Nonpoint Education for Municipal Officials) and the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center. This tool will be used for each catchment to an MS4 outfall. The CT DEEP criteria offered two options for calculating DCIA from impervious cover percentages. Review of these two options suggested that Option 1 was more appropriate at the time of SMP development, based on the limited information available. The Option 1 equation is as follows and will be used for each outfall and associated catchment area, where IC is the abbreviation for Impervious Cover:

$0.1 \times (IC\%)^{1.5} = \% DCIA$

The above-described method will be used for initial calculations, although CT DOC may revisit the method at a later date or refine the data.

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 completedor s projected completion date | Addic og alideralis |
|--|--------------|--|------------------|---------------------------------------|--------|--|---------------------------------|
| en er hen i besten syn med en som den sin hen sin den som en sen en sen sen som som en sen som som som som som | Complete/on- | Training program developed | Number of staff | CT DOC | | | The training has |
| 6-1 Develop/implement formal employee training | going | | trained annually | Facilities Management | Jul 1, | | been incorporated into other |
| program | | | | and | 2019 | | currently available |
| | | | | Engineering | | <u> </u> | on-line training |

| | | | | | | | (hazardous waste). |
|--|-------------|--|--|--|------------------|--------|-----------------------|
| | Complete | Adopted DEEP BMPs for grass clippings, mowing techniques, fertilizer application, and watering practices Completed procedure for geese management. | Written plan Quantities of chemicals and leaves, number of floor drains, vehicles, etc. | CT DOC Facilities Management and Engineering | | 2/5/18 | |
| 6-2 Implement MS4 property and operations maintenance | | Adopted DEEP BMPs for grass clippings, mowing techniques, fertilizer application, and watering practices Adopted DPH BMPs for dumpsters. Included SMP for York aquifer protection area. Adopted DEEP guidance for vehicles and equipment. Adopted DEEP BMPs for fueling stations. Comply with vehicle maintenance wastewater discharge General Permit requirements. Addressed the outside washing of vehicles. Leaves are blown into nearby wooded areas. | | | Jul 1, 2018 | 2/5/18 | |
| 6-3 Implement coordination with interconnected MS4s | Complete | Registration copies provided to Town of Cheshire, Town of East Lyme, MDC (Hartford). Letter to Town of East Lyme included notification of SMP. | Transmit information to MS4s # of communication per year | CT DOC Facilities Management and Engineering | Not specified | 4/3/17 | |
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 | In progress | Started development of procedure | Plan developed Number of sources, number of contacted sources | CT DOC Facilities Management and Engineering | Not specified | | |

| 6-5 Evaluate additional measures for discharges to impaired waters | Complete | No discharges to impaired waters | NA | CT DOC Facilities Management and Engineering | Not specified | 7/21/17 | |
|---|-------------|--|-------------------------------|--|------------------|---------|--|
| 6-6 Track projects that disconnect DCIA | NA | Due to the security of the facilities and safety of the public, the retrofit program and goals to disconnect existing DCIA through retrofit and redevelopment projects will be difficult to implement. Retrofit and redevelopment projects and goals to modify existing developed sites will not be possible for DOC. To the extent possible, new development/redevelopment will consider DCIA. CT DOC and CT DEEP have previously discussed this BMP and agreed that due to requirements for public safety and security, there are development/redevelopment/retrofit limitations, because of the requirement to have specific pavement areas associated with these correctional facilities. As such, opportunities for DCIA disconnection will be limited at the six facilities which comprise CT DOC's MS4. To the extent possible, new development/redevelopment will consider DCIA. | | | Jul 1, 2017 | | |
| 6-7 Develop/Implement infrastructure repair/rehab program | In progress | Started development of procedure | Number of sites identified | CT DOC Facilities Management and Engineering | Jul 1, 2021 | | |
| 6-8 Develop/implement plan to identify/prioritize retrofit projects | NA | Due to the security of the facilities and safety of the public, the retrofit program and goals to disconnect existing DCIA through retrofit and redevelopment projects will be difficult to implement. Retrofit and redevelopment projects and goals to | | | Jul 1, 2020 | | |

| | | | 1 | | T | |
|------------------------|----|---|-------|--------|---|--|
| | | modify existing developed sites will | | | | |
| | | not be possible for DOC. To the | | | | |
| | | extent possible, new | | | | |
| | | development/redevelopment will | | | | |
| | | consider DCIA. CT DOC and CT DEEP | | | | |
| | | have previously discussed this BMP | | | | |
| | | and agreed that due to requirements | | | | |
| | | for public safety and security, there | | | | |
| | | | | | | |
| | | are | | | | |
| | | development/redevelopment/retrofit | | | | |
| | | limitations, because of the | | | | |
| | | requirement to have specific | | | | |
| | | pavement areas associated with | | | | |
| | | these correctional facilities. As such, | | | | |
| | | opportunities for DCIA disconnection | | | | |
| | | will be limited at the six facilities | | | | |
| | | which comprise CT DOC's MS4. To | | | | |
| | | the extent possible, new | | | | |
| | | development/redevelopment will | • | | | |
| | | consider DCIA. | | | | |
| | NA | Due to the security of the facilities | | | | |
| | NA | and safety of the public, the retrofit | | | | |
| | | | | | | |
| | | program and goals to disconnect | | | | |
| | | existing DCIA through retrofit and | | | | |
| | | redevelopment projects will be | | | | |
| | | difficult to implement. Retrofit and | | | | |
| | : | redevelopment projects and goals to | | | | |
| | | modify existing developed sites will | | | | |
| | | not be possible for DOC. To the | | | | |
| | | extent possible, new | | | | |
| | | development/redevelopment will | | | | |
| 6-9 Implement retrofit | | consider DCIA. CT DOC and CT DEEP | | Jul 1, | | |
| projects to disconnect | | have previously discussed this BMP | | 2022 | | |
| 2% of DCIA | | and agreed that due to requirements | | 2022 | | |
| | | for public safety and security, there | | | | |
| | | are | | | | |
| | | development/redevelopment/retrofit | | | | |
| | | limitations, because of the | | | | |
| | | requirement to have specific | | | | |
| | | pavement areas associated with | | | | |
| | | | | | | |
| | | these correctional facilities. As such, | | | | |
| | | opportunities for DCIA disconnection | | | | |
| | | will be limited at the six facilities | | | | |
| | | which comprise CT DOC's MS4. To | | | | |
| | | the extent possible, new | | | | |

| | | development/redevelopment will consider DCIA. | | | | | · · · |
|---|-----------------------|--|--|--|---------------------|--------|-------|
| 6-10 Develop/implement street sweeping program | Complete/on- going | Only salt is used for de-icing therefore there is very little debris on roads since there is no sand used. Because of this, the street sweeping program will consist of periodic inspections and sweeping as needed. Outside Grounds staff together with inmate work crews perform sweeping with hand and power brooms. | Written procedures | CT DOC Facilities Management and Engineering | Jul 1, 2018 | | |
| 6-11 Develop/implement catch basin cleaning program | Complete/on- going | CT DOC has developed and will implement a preventative maintenance schedule for routine cleaning of catch basins such that no catch basin sump will be more than 50% full when cleaned. CT DOC will utilize private contractors for catch basin cleaning which will take place in the Spring (usually April) following the cessation of winter maintenance activities (i.e. sanding, deicing, etc.). | Plan/schedule for CB inspection/cleaning | CT DOC Facilities Management and Engineering | , Jul 1, 2020 | | |
| 6-12 Develop/implement snow management practices | Complete/on- going | In addition to DOC policies, adopted DEEP BMPs for snow disposal and CT DOT Winter Highway Maintenance Operations guidance. | Written Plan Amount of deicing chemicals/sand, # of personnel trained, number of lane-miles treated | CT DOC Facilities Management and Engineering | Jul 1, 2018 | 2/5/18 | |

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

Formalize leaf management procedure.

Formalize program to control other sources of pollutants to the MS4.

Develop/implement infrastructure repair/rehab procedure.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

| Metrics | |
|---|---|
| Employee training provided for key staff | Complete/on-going |
| Street sweeping | Complete/on-going |
| | |
| Curb miles swept | |
| Volume (or mass) of material collected | |
| Catch basin cleaning | Complete/on-going |
| Total catch basins in priority areas | 12 |
| Total catch basins in MS4 | 12 |
| 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) | No impaired waters |
| Snow management | On going |
| Type(s) of deicing material used | Sand/salt mixture from East Windsor DOT Garage. FIRESTORM MAG CHLORIDE Ice Melt |
| Total amount of each deicing material applied | sand/salt mix, |
| *Firestorm granular ice melter is a magnesium chloride, sodium, urea blend that meets | *FIRESTORM MAG |
| EPA Safer Product Standards | CHLORIDE 320 bags (50 lbs/bag) |
| Type(s) of deicing equipment used | |
| Lane-miles treated | Lane miles are tracked through vehicle mileage sheets and snow reports. |
| Snow disposal location | NA |
| Staff training provided on application methods & equipment | Staff receive training on the operation of all |

| | appropriate |
|--|-------------|
| | equipment. |
| Municipal turf management program actions (for permittee properties in basins with N/P impairments) | |
| Reduction in application of fertilizers (since start of permit) | NA |
| Reduction in turf area (since start of permit) | NA |
| Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems) | NA |
| Cost of mitigation actions/retrofits | NA |

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

CT DOC will prioritize inspection and maintenance of catch basins located near construction activities and clean these structures more often if inspection and maintenance indicate excessive loadings. CT DOC has developed and will implement a preventative maintenance schedule for routine cleaning of catch basins such that no catch basin sump will be more than 50% full when cleaned. CT DOC will utilize private contractors for catch basin cleaning which will take place in the Spring (usually April) following the cessation of winter maintenance activities (i.e. sanding, deicing, etc.). Disposal of catch basin cleanings will be in accordance with applicable policies, guidance, and regulations. CT DOC has adopted CT DEEP's guideline entitled "Guideline for Municipal Management Practices for Street Sweepings & Catch Basin Cleanings".

6.5 Retrofit program

Report.

Briefly describe the Retrofit Program identification and prioritization process; the projects selected for implementation of each project selected for implementation of each project. Provide information if available in 2018 report. Section to be completed for the 2019

Due to the security of the facilities and safety of the public, the retrofit program and goals to disconnect existing DCIA through retrofit and redevelopment projects will be difficult to implement. Retrofit and redevelopment projects and goals to modify existing developed sites will not be possible for DOC. To the extent possible, new development/redevelopment will consider DCIA.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. Provide information if available in 2018 Section to be completed for the 2019 Annual Report. CT DOC has had discussions with CT DEEP regarding specific BMPs within this MCM and discussed unacceptable safety and security risks which could arise from compliance with several of the BMPs. It was agreed that there would be public safety and security concerns if this is something that DOC is required to implement. The retrofit program is a goal to disconnect DCIA areas each year. The security of the facilities and safety of the public can be reasons that preclude reaching this goal. To the extent possible, new development/redevelopment will consider DCIA.

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 infor

available in 2018 report. <u>Section to be completed for the 2019 Annual Report</u>.

CT DOC has had discussions with CT DEEP regarding specific BMPs within this MCM and discussed unacceptable safety and security risks which could arise from compliance with several of the BMPs. It was agreed that there would be public safety and security concerns if this is something that DOC is required to implement. The retrofit program is a goal to disconnect DCIA areas each year. The security of the facilities and safety of the public can be reasons that preclude reaching this goal. To the extent possible, new development/redevelopment will consider DCIA.

Part II: Impaired waters investigation and monitoring NA, No discharges to impaired waters.

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. |
|---|
| NA, no discharges to impaired waters. |
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2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data NA, no discharges to impaired waters.

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 (D) | 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) NA, no discharges to impaired waters.

Provide the following information for outfalls exceeding the pollutant threshold.

| Outfall | Status of drainage are | a investigation | Control measure implement address impairment | ation to |
|---------|------------------------|-----------------|---|----------|
| | | | | |
| | | | | |

4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43) NA, no discharges to impaired waters.

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) |
|---------|-------------|--------------|---------|------------------------------|
| | | | · · · | |
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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 |
|------------------------------------|-------------------|----------|
| MD-O-1 | Catchment/Outfall | Excluded |
| MD-0-2 | Catchment/Outfall | Low |
| MD-O-3 | Catchment/Outfall | Low |
| MD-O-4 | Catchment/Outfall | High |
| MD-0-5 | Catchment/Outfall | Low |
| MD-O-6 | Catchment/Outfall | Low |
| MD-0-7 | Catchment/Outfall | Excluded |

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.

| Interconnection | Screening / sample date | Ammonia | Chlorine | Conductivity | ALC: A CONTRACT OF A CONTRACT | E coli or enterococcus | Surfactants | Water Temp | Pollutant of concern | if required, follow-up actions taken |
|-----------------|-------------------------------|---------|----------|--------------|-------------------------------|---------------------------|-------------|---------------|-------------------------|---|
| MD-0-1 | 6/22/17 | | | | | | | | | No flow observed |

| MD-0-2 | 6/22/17 | No flow observed |
|--------|---------|------------------|
| MD-0-3 | 6/22/17 | No flow observed |
| MD-0-4 | 6/22/17 | No flow observed |
| MD-0-5 | 6/22/17 | No flow observed |
| MD-0-6 | 6/22/17 | No flow observed |
| MD-0-7 | 6/22/17 | No flow observed |

2.2 Wet weather sample and inspection data Not Started

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

| Outfall / Interconnection ID Annonia Chloring | Conductivity: Salinity E. coli or Enterococcus | Surfactants Water, Temp. Pollotautor Concernt | |
|---|---|---|--|
| | | | |
| | | | |

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 JD | Receiving Water | System Vulnerability Factors; |
|---------------|-------------------------------------|---|
| MD-O- 1 | UNNAMED TRIBUTARY TO STONY BROOK | |
| MD-O- 2 | UNNAMED TRIBUTARY TO STONY BROOK | Initial rank as High Priority catchment due to presence of generating sites |
| MD-O- 3 | UNNAMED TRIBUTARY TO STONY BROOK | Initial rank as High Priority catchment due to presence of generating sites |

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| MD-O- 4 | UNNAMED TRIBUTARY TO STONY BROOK | Initial rank as High Priority catchment due to presence of generating sites |
|------------|-------------------------------------|---|
| MD-0- 5 | UNNAMED TRIBUTARY TO STONY BROOK | |
| MD-O- 6 | UNNAMED TRIBUTARY TO STONY BROOK | |
| MD-O- 7 | UNNAMED TRIBUTARY TO STONY BROOK | |

Where SVFs are:

- 1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
- 2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
- 3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
- 4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
- 5. Common trench construction serving both storm and sanitary sewer alignments.
- 6. Crossings of storm and sanitary sewer alignments.
- 7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
- 8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
- 9. Areas formerly served by combined sewer systems.
- 10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
- 11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
- 12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data Not Started, *due to the safety and security of the inmate population, key junction manholes on DOC property are sealed shut and not accessible. Because of this, DOC seeks a waiver from the requirement to conduct key junction manhole inspections in favor of outfall sampling.

| *Key Junct Manhole ID | ion Screening Sample da | / Visual/olfar evidence of discharge | ctory 1Wicit Ami | nonia Chlorin | Surfactants |
|-----------------------------|-------------------------------|--|---------------------|---------------|-------------|
| | | | | | |
| | | | | | |

3.3 Wet weather investigation outfall sampling data Planned for 2024 (high priority), 2025 (low priority)

| | Outfall ID | Sample date | Ammonia | Chlorine | Surfactants |
|-----|---------------|-------------|--|----------|-------------|
| | | | | | |
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3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure Not Started

| Discharge Source location focation | Discharge description | Method of discovery | Date of discovery | Mingation or enforcement action | Estimated volume of flow temored |
|---------------------------------------|-----------------------|------------------------|----------------------|---------------------------------|--|
| | | | | | |
| | | | | | |

Part III: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer

Print name:

Document Prepared by

Chris Iwanik

Print name: **Rich Pease**

Signature / Date: 3/27/24

Email: Christopher.lwanik@ct.gov

RichardPense Email: rich.pease@ct.gov

Signature / Date: 3/27/24