

Year 4 Annual Report
Massachusetts Small MS4 General Permit
New Permittees
Reporting Period: July 1, 2021-June 30, 2022

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2021 and June 30, 2022 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input type="checkbox"/> Phosphorus
<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input checked="" type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
			Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 4 Requirements

- Identified and developed an inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
 - The SSO inventory is attached to the email submission
 - The SSO inventory can be found at the following website:

NA
- Identified each outfall and interconnection discharging from MS4, classified into the relevant category, and priority ranked each catchment for investigation
 - The priority ranking of outfalls/interconnections is attached to the email submission
 - The priority ranking of outfalls/interconnections can be found at the following website:

See Table 5-1 on page 12 of the IDDE Plan (appendix to the SWMP) found at the following link: <https://www.umassmed.edu/globalassets/growing-green/files/umass-chan-medical-school-swmp-2022.pdf>
- Developed written IDDE plan including a procedure for screening and sampling outfalls
- Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants

- Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or
 - operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
 - Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

UMass Chan Medical School does not own any facilities that require a SWPPP.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice Requirements
- Kept records relating to the permit available for 5 years and made available to the public
- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

NA

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Public outreach messages related specifically to pet waste are not applicable to UMass Chan Medical School, as dog walking is not allowed on UMass Chan Medical School campuses and the school does not have the authority to issue dog licenses. UMass Chan Medical School also does not own or operate septic systems. As a non-traditional MS4, UMass Chan Medical School's target audiences differ slightly from those targeted by

traditional (municipal) MS4s. UMass Chan Medical School's public education and outreach messages focus on stormwater pollutants that are most likely to be generated on campus properties (e.g., trash, sediment, fertilizer, leaf litter, and grass clippings). See BMPs 1-2 through 1-6 below which describe UMass Chan Medical School's public outreach and education messages.

Lake and Pond Phosphorus TMDL

Completed Legal Analysis

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

NA

Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:

NA

Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted? Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

Yes

No

If yes, describe below, including any relevant impairments or TMDLs:

UMass Chan Medical School's list of receiving waters previously included facilities located at 333 South Street (Shrewsbury), 222 Maple Avenue (Shrewsbury) and 460 Walk Hill Street (MassBiologics, Mattapan). After further review of facility ownership, these facilities were determined to be owned by Worcester City Campus Corporation and not UMass Chan Medical School. Therefore, these facilities are not part of UMass Chan Medical School's jurisdiction and their associated receiving waterbodies were removed from the list of receiving waters and SWMP in June 2022.

Part IV: Minimum Control Measures

Part IV includes some of the metrics that will be required in upcoming annual reports. For this annual report, please report on MCM1 and MCM2 and any other metrics below that have an asterisk (*), along with any other metrics that you have started within this reporting period. Other than the metrics with an asterisk, the rest of the metrics are optional for new permittees. Then, proceed to Part V.

*MCM1: Public Education

Number of educational messages completed during this reporting period:

Below, report on the educational messages completed during this reporting period. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

BMP:1-2 Web Page

Message Description and Distribution Method:

Maintained stormwater management page located on Growing Green website. The webpage includes stormwater pollution prevention tips, links to ThinkBlue Massachusetts videos and educational materials, and information about UMass Chan Medical School's stormwater management program.
<https://www.umassmed.edu/growinggreen/stormwater-management/>

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP:1-3 Growing Green Newsletter

Message Description and Distribution Method:

Posted an article titled "Green Lawns and Stormwater" on UMass Chan Medical School's Growing Green newsletter, which discussed the impacts of lawn care on aquatic habitats and shared tips for proper lawn management. The post also contained a link to Think Blue Massachusetts.

<https://www.umassmed.edu/growinggreen/newsletter/green-lawn-stormwater-2022/>

Targeted Audience:

Responsible Department/Parties: Environmental Health & Safety Office, Sustainability

Measurable Goal(s):

Number of people on Growing Green newsletter distribution list is 11,000.

Message Date(s): May 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

NA

BMP:1-4 Stormwater Fact Sheet

Message Description and Distribution Method:

Shared stormwater education materials at UMass Chan Medical School's annual Earth Day event, which this year was focused on e-waste recycling. Educational materials included a card with a QR code that linked to UMass Chan Medical School's stormwater webpage. The card was filled with seeds and was able to be planted.

Targeted Audience: Visitors, students, staff

Responsible Department/Parties: Environmental Health & Safety Office

Measurable Goal(s):

Number of people engaged at the e-waste recycling event is not available. However, the event collected 5,598 lbs of material, including 981 lbs of air conditioners, 4,184 lbs of electronics, and 433 lbs of co-mingled material.

Message Date(s): June 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

NA

BMP:1-5 Contractor Education

Message Description and Distribution Method:

Provided a pamphlet to contractors with each new purchase order to educate them on UMass Chan Medical School's procedures and best practices, including stormwater management.

Targeted Audience: Contractors

Responsible Department/Parties: Facilities Engineering, Facilities Maintenance, Environmental Health & Safety

Measurable Goal(s):

All current contractors have received pamphlets.

Message Date(s): June 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

NA

BMP:1-6 Facility Staff Education

Message Description and Distribution Method:

Provided a training to facility staff on UMass Chan Medical School's O&M Plan, including measures such as landscape maintenance to reduce phosphorus loading.

Targeted Audience: Facility staff

Responsible Department/Parties: Facilities Engineering, Facilities Maintenance, Environmental Health & Safety

Measurable Goal(s):

Number of facility staff that completed the O&M training module during this reporting period was 117.

Message Date(s): June 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

NA

Add an Educational Message

***MCM2: Public Participation**

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) **during this reporting period:**

UMass Chan Medical School posted its SWMP online on the Growing Green Stormwater Management webpage to allow for ongoing public review of the SWMP: <https://www.umassmed.edu/growinggreen/stormwater-management/>
The webpage provides an email address (stormwater@umassmed.edu) for the public to submit comments or request more information. No comments were received during this reporting period.

Was this opportunity different than what was proposed in your NOI? Yes No

Describe any other public involvement or participation opportunities conducted **during this reporting period:**

UMass Chan Medical School hosted an E-Waste Recycling event on campus for members of the UMass Chan Medical School community to dispose of electronic waste for recycling purposes. Educational materials on UMass Chan Medical School's stormwater management program were shared at the event, including a card with a QR code that linked to the Growing Green Stormwater Webpage. The card was filled with seeds and was able to be planted. This event was held on June 9, 2022.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

*Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

This SSO section is NOT applicable because we DO NOT have sanitary sewer

Below, report on the number of SSOs identified in the MS4 system and removed **during this reporting period.**

Number of SSOs identified:

Number of SSOs removed:

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified **since the effective date of the permit (July 1, 2018).**

Total number of SSOs identified:

Total number of SSOs removed:

MS4 System Mapping

Below, check all that apply.

The following elements of the Phase I map have been completed:

- Outfalls and receiving waters
- Open channel conveyances
- Interconnections
- Municipally-owned stormwater treatment structures
- Waterbodies identified by name and indication of all use impairments

Initial catchment delineations

Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

NA

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- No outfalls were inspected
- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

Since no outfalls were inspected there is no data to attach but the form automatically populates that option button.

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened: 0

Below, report on the percent of outfalls/interconnections screened to date.

Percent of outfalls screened: 0

Optional: Provide additional information regarding your outfall/interconnection screening:

NA

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- No catchment investigations were conducted
- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following website:

NA

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period: 0

Below, report on the percent of catchments investigated to date.

Percent of total catchments investigated: 0

Optional: Provide any additional information for clarity regarding the catchment investigations below:

NA

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- No illicit discharges were found
- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

NA

*Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed **during this reporting period.***

Number of illicit discharges identified: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 gallons/day

*Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed **since the effective date of the permit (July 1, 2018).***

Total number of illicit discharges identified: 0

Total number of illicit discharges removed: 0

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

NA

Employee Training

Describe the frequency and type of employee training if conducted **during this reporting period:**

This reporting period 117 facility staff completed the Stormwater Online Training module, which includes training on MS4 permit requirements, good housekeeping, and sources of stormwater pollution (i.e., illicit discharge identification).

Below, report on the construction site plan reviews, inspections, and enforcement actions completed during this reporting period.

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

No site plan reviews were completed because no projects required them during this reporting period. UMass Chan Medical School requires contractors to perform site inspections in accordance with EPA's stormwater CGP requirements.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

***As-built Drawings**

Describe the status of the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites:

UMass Chan Medical School has developed a post-construction stormwater management guidance document for contractors, which includes the requirement to submit as-built drawings to UMass Chan Medical School. No as-built plans were received during this reporting period because no projects required them.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment including any planned or completed changes to local regulations and guidelines:

UMass Chan Medical School will review and assess street and parking lot design standards and other design guidelines that affect the creation of impervious cover in Permit Year 6.

Green Infrastructure Report

Describe the status of the green infrastructure report including the findings and progress towards making the practice allowable:

Not applicable. Non-traditional MS4s do not need to meet the requirements of part 2.3.6.c.

[Empty rectangular box]

Retrofit Properties Inventory

Describe the status of the inventory of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

UMass Chan Medical School will identify at least five (5) campus sites that could be modified or retrofitted with stormwater BMPs in Permit Year 6.

MCM6: Good Housekeeping

***Catch Basin Cleaning**

- The catch basin cleaning optimization plan or schedule is not complete
- The catch basin cleaning optimization plan or schedule is attached to the email submission
- The catch basin cleaning optimization plan or schedule can be found at the following website:

NA

*Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins **during this reporting period.***

Number of catch basins inspected: 0

Number of catch basins cleaned: 0

Total volume or mass of material removed from all catch basins: 0 cubic feet

Below, report on the total number of catch basins in the MS4 system, if known.

Total number of catch basins: 175

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

If a catch basin sump is more than 50% full during two consecutive routine inspections, the catch basin will be added to a priority list to be inspected on an annual basis.

***Street Sweeping**

- The written procedures for sweeping streets and municipal-owned lots is not complete
- The written procedures for sweeping streets and municipal-owned lots is attached to the email submission

- The written procedures for sweeping streets and municipal-owned lots can be found at the following website:

See Section 6.2 on page 23 of the O&M Plan (appendix to the SWMP) found at the following link: <https://www.umassmed.edu/globalassets/growing-green/files/umass-chan-medical-school-swmp-2022.pdf>

Report on street sweeping completed *during this reporting period* using one of the three metrics below.

- Number of miles cleaned:
- Volume of material removed: cubic feet
- Weight of material removed: [Select Units]

If applicable:

For rural uncurbed roadways with no catch basins, describe the progress of the inspection, documentation, and targeted sweeping plan:

NA

***O&M Procedures and Inventory of Permittee-Owned Properties**

Below, check all that apply.

The following permittee-owned properties have been inventoried:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

***Winter Road Maintenance**

- The written procedures for winter road maintenance including the storage of salt and sand is not complete
- The written procedures for winter road maintenance including the storage of salt and sand is attached to the email submission
- The written procedures for winter road maintenance including storage of salt and sand can be found at the following website:

See Section 7.2 on page 25 of the O&M Plan (appendix to the SWMP) found at the following link: <https://www.umassmed.edu/globalassets/growing-green/files/umass-chan-medical-school-swmp-2022.pdf>

***Stormwater Pollution Prevention Plan (SWPPP)**

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed:

Describe any corrective actions taken at a facility with a SWPPP:

NA. UMass Chan Medical School does not own any facilities that require a SWPPP.

Part V: Additional Information

***Monitoring or Study Results**

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- Not applicable
- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following website(s):

NA

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

NA

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

NA

COVID-19 Impacts

Optional: If any of the above year 4 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

NA

***Activities Planned for Next Reporting Period**

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 4 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Complete IDDE ordinance
- Complete Construction/ Erosion and Sediment Control (ESC) ordinance
- Develop written IDDE plan including a procedure for screening and sampling outfalls
- Develop a written catchment investigation procedure and added the procedure to the SWMP

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Continue public education and outreach program
- Sweep all curbed roadways at least once within the reporting period
- Provide training within the reporting period to employees involved in IDDE program
- Clean catch basins in accordance with catch basin cleaning procedures to ensure that no catch basin is greater than 50% full

Provide any additional details on activities planned for permit year 5 below:

Plan to complete PCP Funding Source Assessment.

*Part VI: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

John Baker

Title:

Associate Vice Chancellor

Signature:



Date:

9/29/22

[Signatory may be a duly authorized representative]