

Year 2 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2019-June 30, 2020

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, 2019 and June 30, 2020 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Veterans Affairs Boston Healthcare System West Roxbury Campus
EPA NPDES Permit Number: MAR042011

Primary MS4 Program Manager Contact Information

Name: John Hughes Title: GEMS Program Manager
Street Address Line 1: 1400 VFW Parkway
Street Address Line 2: N/A
City: West Roxbury State: MA Zip Code: 02132
Email: john.hughes5@va.gov Phone Number: (857) 203-6522

Stormwater Management Program (SWMP) Information

SWMP Location (web address): <https://www.boston.va.gov/about/index.asp>
Date SWMP was Last Updated: Jun 30, 2020

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

VA Boston Healthcare System-West Roxbury, 1400 VFW Parkway, West Roxbury, MA 02132. SWMP is posted on VA website. VA does not post management documents on external websites.

Part II: Self-Assessment

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

Impairment(s)			
<input 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 checked="" type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input checked="" type="checkbox"/> Charles River Watershed Phosphorus	<input 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 2 Requirements

- Completed Phase I of system mapping
- Developed a written catchment investigation procedure and added the procedure to the SWMP
- 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
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- 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

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 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:

The written catchment procedure and written procedure to require the submission of as-built drawings and ensure long term operation and maintenance of stormwater treatment structures was developed prior to Permit Year 2 and will be incorporated into the SWMP during Permit Year 3. The VABHS West Roxbury is entirely

owned by the government and there is an existing inventory of all facilities located on campus. Language will be added to the SWMP specifying which facilities fall under one of the three categories listed above in Permit Year 3. A consultant has been contracted using upcoming fiscal year funds to evaluate the need for a SWPPP at this campus.

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
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs
 - The updated SSO inventory is attached to the email submission
 - The updated SSO inventory can be found at the following website:

N/A

- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated outfall and interconnection inventory and priority ranking as needed

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual 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:

N/A

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:

The VABHS West Roxbury does not issue dog licenses and no septic systems are located on the campus, so these educational messaging activities are not applicable.

Charles River Watershed 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:

The VABHS West Roxbury is subject to federal policies and procedures. As such, no legal analysis was conducted as part of the Phase I Phosphorus Control Plan requirements; however, existing federal policies and procedures such as Section 438 of the Energy Independence and Security Act are implemented at the campus that mandate the use of stormwater treatment structures on projects >5,000 square feet to mitigate the affects of stormwater pollution. Anticipated stormwater treatment structure costs to applicable projects are built in the project budget as a function of implementation of this mandate.

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

N/A

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?

- Yes
- No

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

N/A

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

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: Bacteria/Pathogen public education and outreach

Message Description and Distribution Method:

Annual message encouraging and education on the proper management of pet waste; Dissemination of educational materials to dog owners. Message was included in the GEMS quarterly August 2019 and March 2020 newsletter disseminated to VABHS West Roxbury employees.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Dissemination of educational messaging related to applicable bacteria/pathogen impacts within permit time frames and frequencies. No visible pet waste present on grounds or within MS4 infrastructure.

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:Phosphorus public education and outreach

Message Description and Distribution Method:

The GEMS Program Manager educates Grounds staff on the importance of the timely removal and disposal leaf litter on campus grounds prior to the start of fall grounds maintenance activities. The VABHS West Roxbury contracts fertilizer application to TruGreen. TruGreen applies minimal fertilizer to grassed areas on campus to avoid the potential for fertilizer to be washed into the MS4.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Disseminate educational messaging related to phosphorus impacts within permit time frames and frequencies.

Timely removal of leaf litter from grounds and no excessive leaf litter observed entering MS4 infrastructure.

Message Date(s): Leaf litter management - August 2019 and March 2020. Fertilizer application - managed by contractor.

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:

The VABHS West Roxbury revised educational messaging to more effectively reach the target audience directly responsible for maintaining the campus grounds. As a non-traditional MS4, the VABHS West Roxbury manages their grounds through use of internal staff, with the exception of fertilizer application, which is contracted. The VABHS West Roxbury selected a contractor that practices environmentally friendly fertilizer application practices.

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:**

SWMP development included data provision and feedback from various VA personnel involved in activities that relate to MS4 operations and included discussions related to construction inspections, employee engagement during training sessions, conversations with leadership, and review of local, state, and federal regulatory initiatives and environmental conditions.

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:**

The VA BHS West Roxbury has reached out to the Boston Water and Sewer Commission regarding information sharing of screenings/samplings conducted on interconnections. An Earth Day event with associated clean-up of the VA BHS West Roxbury grounds was scheduled for April 2020, but it was canceled due to the COVID-19 pandemic.

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:

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

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

The VA BHS West Roxbury updated their existing MS4 map with information obtained during surveys conducted in 2015 and CCTV activities conducted in July 2019, including updated outfall/ interconnection information, catchment delineations, outfall/interconnection spatial location, pipes, flow direction, manholes, catch basins, storm sewer size, shape, and material, topography, and orthophotography. No open channel conveyances are located on the campus.

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.

- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

Interconnection screening conducted on June 17, 2020. All interconnections were screened and observed to be dry.

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

Number of outfalls screened:

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.

- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following website:

Catchment investigations conducted between June 17 and June 19, 2020. All catchments were investigated during this period.

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

The VABHS West Roxbury utilized SDE, Inc. to conduct interconnection screening and catchment investigations of the four interconnections and their related catchments located on campus. All four interconnections were observed to be dry. No illicit discharges were identified during completion of this work.

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.

- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

*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:

Number of illicit discharges removed:

Estimated volume of sewage removed: 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:

Total number of illicit discharges removed:

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

No flow was observed at any of the interconnections. Surfactants and phosphorus were detected in one sample collected during the catchment investigations in one sample. The detected concentrations were slightly above the permit threshold criteria for potential illicit discharges. Upon further investigation, the source of surfactants and phosphorus in that sample were confirmed to be from small equipment wash waters entering a catch basin near a maintenance garage. The associated staff were educated on the need to perform washing activities in grassy areas away from catch basins.

Employee Training

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

All new employees receive training during New Employee Orientation. Employees receive general awareness training during department meetings. Staff also received specific training on the IDDE Program Manual contents and how to conduct field screening/sampling activities in July 2019. Stormwater training is provided in conjunction with our SPCC training once per year. Due to COVID-19, we were unable to provide face-to-face training with employees.

MCM4: Construction Site Stormwater Runoff Control

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:

The VABHS West Roxbury performs site plan reviews, inspections, and enforcement actions (if required) on all construction sites >5,000 square feet, which is more stringent than the permit requirement. Minor infractions observed during site inspections were conveyed verbally to the contractor and resolved within a 24-hour period of their discovery.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment**Ordinance or Regulatory Mechanism**

Below, select the option that describes your ordinance or regulatory mechanism progress.

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- Bylaw, ordinance, or regulations have not been updated or adopted

As-built Drawings

Describe 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:

The VA has specifications in place that require the submittal of as-built plans within 1 year of the completion of the project. Long term O&M plan submittal is a contractually mandated requirement of contractors.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

The VA BHS West Roxbury is currently reviewing the requirements of this assessment as it pertains to this facility. A 5 story parking garage is currently under construction that includes "0" discharge design for storm water.

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

The VA BHS West Roxbury is currently reviewing the requirements of this report and assessing all construction projects scheduled for design over this time period for compliance with this requirement. Although this requirement is not applicable to non-traditional MS4s, this facility is considering practices such as green roofs, rain gardens, etc. to potentially be implemented as part of Section 438 EISA requirements in new/redevelopment areas.

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, 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:

This inventory is in progress. The 5 story parking garage currently being constructed is an example of an impervious area that is being retrofitted for "0" storm water discharge.

MCM6: Good Housekeeping

Catch Basin Cleaning

*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:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

No catch basin sumps were observed to be more than 50% full during two consecutive routine inspection/cleaning events.

Street Sweeping

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

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

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

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:

The VABHS West Roxbury has contracted with a consultant during Permit Year 3 to determine the need for a SWPPP at this campus. If a SWPPP is required, it will be drafted and implemented.

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):

N/A

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:

N/A

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:

N/A

COVID-19 Impacts

Optional: If any of the above year 2 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:

N/A

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 3 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

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
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all uncurbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary

Provide any additional details on activities planned for permit year 3 below:

The VABHS West Roxbury will be working on a preliminary phosphorus control plan containing the required elements through Permit Year 3. As part of this work, the VABHS West Roxbury will coordinate with Boston Water and Sewer Commission to share relevant information during preparation of the plan that may assist BWSC with meeting their own phosphorus reduction goals.

Part V: Certification of Small MS4 Annual Report 2020

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: Title:

Signature: Date:

[Signatory may be a duly authorized representative]

Note: When prompted during signing, save the document under a new file name.

Annual Report Submission

Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.

EPA: stormwater.reports@epa.gov

MassDEP: laura.schifman@mass.gov

Paper Signature:

If you did not sign electronically above, you can print the signature page by clicking the button below.

Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.