

Year 1 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: May 1, 2018-June 30, 2019

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.

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: na

City: West Roxbury State: MA Zip Code: 02132

Email: john.hughes5@va.gov Phone Number: (857) 203-6522

Fax Number: na

Stormwater Management Program (SWMP) Information

SWMP Location (web address): GEMS Office, Building 5, Room 1 A.

Date SWMP was Last Updated: Sep 7, 2018

If the SWMP is not available on the web please provide the physical address and an explanation of why it is not posted on the web:

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 website.

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 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)			
In State:	<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	
Out of State:	<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 1 Requirements

- ☒ Develop and begin public education and outreach program
- ☒ Identify and develop 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:
- ☒ Develop written IDDE plan including a procedure for screening and sampling outfalls
- ☒ IDDE ordinance complete
- ☐ Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank 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:
- ☒ Construction/ Erosion and Sediment Control (ESC) ordinance complete
- ☒ Develop written procedures for site inspections and enforcement of sediment and erosion control measures
- ☒ Develop written procedures for site plan review
- ☒ Keep a log of catch basins cleaned or inspected
- ☒ Complete inspection of all stormwater treatment structures

Annual Requirements

- ☒ Annual opportunity for public participation in review and implementation of SWMP
- ☐ Comply with State Public Notice requirements
- ☒ 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
- ☒ All curbed roadways have been swept a minimum of one time per year

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

Annual Requirements

*Public Education and Outreach**

- ☐ Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☐ Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- ☐ Provide 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)*

Charles River Watershed Phosphorus TMDL

- ☐ Begin Phase 1 Phosphorus Control Plan (PCP)

Use the box below to input additional details on any unchecked boxes above or any additional information you would like to share as part of your self assessment:

The IDDE Program Manual was completed at the end of June and proactively includes the Catchment Investigation Procedures due at the end of this year.

The campus MS4 was CCTV'd in July 2019 to obtain an accurate understanding of the extent and condition of MS4 infrastructure. Outfalls and interconnection locations were confirmed during the CCTV investigation. This information will be integrated into the priority rankings prior to December 31, 2019.

The State Public Notice requirements are not applicable to the VA BHS West Roxbury. The "public" is reached through internal notification procedures, such as emails and newsletters. The SWMP and Annual Reports are available internally for public review.

Bacteria/Pathogen public education and outreach was conducted in August 2019, including:

- * annual message encouraging the proper management of pet waste; and
- * dissemination of educational materials to dog owners.

There are no former or current septic systems located on campus.

Nitrogen & Phosphorus public education and outreach was conducted in August 2019, including:

- * distribution of an annual message in August 2019 encouraging the proper management of pet waste.

The VA BHS West Roxbury has not started a Phosphorus Control Plan. As a nested Phase II MS4, the VA

BHS West Roxbury will explore structural and other options to mitigate the contribution of phosphorus to the Charles River; however, there are no phosphorus load and reduction criteria currently applicable to this campus.

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:

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 the reporting period: 1

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

BMP:[Bacteria and Pathogens]

Message Description and Distribution Method:

Messaging Pet Waste is conducted through Grounds/Engineering general awareness training and during department meetings.

Targeted Audience: Employees (Grounds, Engineering, Contractors, Police)

Responsible Department/Parties: Engineering/Grounds/Police

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): August 2019

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:[]

Message Description and Distribution Method:

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:[Message name here]

Message Description and Distribution Method:

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:

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during the 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 the 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. Conducted Earth Day Clean ups.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

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

Number of SSOs identified: 0

Number of SSOs removed: 0

Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified since 2013.

Total number of SSOs identified: 0

Total number of SSOs removed: 0

MS4 System Mapping

Describe the status of your MS4 map, including any progress made during the reporting period:

The VA BHS West Roxbury is in the process of updating 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, manholes, catch basins, sanitary sewer system, storm sewer size and material, topography, and orthophotography.

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:

Outfall screening conducted on 7/31/2019. Bacteria and Phosphorus sample will be collected at a later date.

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

Number of outfalls screened: 1

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

Percent of total outfalls screened: 20

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:

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:

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: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: not applicable[UNITS]

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.

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:

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 received MS4 General Permit and Storm Water Management Plan overview training in May 2018. Staff also received specific training on the IDDE Program Manual contents and how to conduct field screening/sampling activities in July 2019.

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: 2

Number of inspections completed: 52

Number of enforcement actions taken: 0

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

Ordinance Development

Describe the status of the post-construction ordinance required to be complete in year 2 of the permit term:

The VA, as a federal entity, abides by Section 438 of the Energy Independence and Security Act (EISA) for all proposed construction projects on campus. Section 438 EISA requires equal or more stringent post-construction requirements for new and redevelopment than what is presented in the MS4 General Permit and applies to all construction projects greater than or equal to 5,000 square feet.

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 required to be complete in year 2 of the permit term:

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 stormwater.

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" stormwater discharge.

MCM6: Good Housekeeping**Catch Basin Cleaning**

Describe the status of the catch basin cleaning optimization plan:

Plan is completed and presented in Section 9.1.7 of the Stormwater Management Plan

If complete, attach the catch basin cleaning optimization plan or the schedule to gather information to develop the optimization plan:

- ☒ 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:

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: 54

Number of catch basins cleaned: 19

Total volume or mass of material removed from all catch basins: 18.55 tons

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

Total number of catch basins: 54

If applicable:

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

Street Sweeping

Describe the status of the written procedures for sweeping streets and municipal-owned lots:

Procedures are complete and are presented in Section 9.1.5 of the Stormwater Management Plan.

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

☐ Number of miles cleaned: Estimated 2 miles

☐ Volume of material removed: [UNITS]

☒ Weight of material removed: 21.93 tons

If applicable:

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

Not applicable

Winter Road Maintenance

Describe the status of the written procedures for winter road maintenance including the storage of salt and sand:

Procedures are complete and are presented in Section 9.1.6 of the Stormwater Management Plan.

Inventory of Permittee-Owned Properties

Describe the status of the inventory, due in year 2 of the permit term, of permittee-owned properties, including parks and open spaces, buildings and facilities, and vehicles and equipment, and include any updates:

This inventory is complete. The VA has a complete inventory of all buildings, vehicles, and equipment.

O&M Procedures for Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment

Describe the status of the operation and maintenance procedures, due in year 2 of the permit term, of permittee-owned properties (parks and open spaces, buildings and facilities, vehicles and equipment) and include maintenance activities associated with each:

The campus is currently compiling existing procedures and creating new procedures compliant with Permit requirements for this control measure.

Stormwater Pollution Prevention Plan (SWPPP)

Describe the status of any SWPPP, due in year 2 of the permit term, for permittee-owned or operated facilities including maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater:

This task has been contracted to a third party to be evaluated in an upcoming fiscal year to determine whether SWPPPs are relevant for these facilities, where present.

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

Number of site inspections completed: 0

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

O&M Procedures for Stormwater Treatment Structures

Describe the status of the written procedure for stormwater treatment structure maintenance:

This procedure is complete and referenced in Section 9.1.7 of the Stormwater Management Plan. Stormwater treatment structure specific operation and maintenance procedures are evaluated and noted concurrently with O&M plan submittals discussed in MCM 5, As-Built Drawings.

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):

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:

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:

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

Yes, I agree ☒

- Complete system mapping Phase I
- Begin investigations of catchments associated with Problem Outfalls
- Develop or modify an ordinance or other regulatory mechanism for post-construction stormwater runoff from new development and redevelopment
- Establish and implement written procedures to require the submission of as-built drawings no later than two years after the completion of construction projects
- Develop, if not already developed, written operations and maintenance procedures
- Develop an inventory of all permittee owned facilities in the categories of parks and open space,

- buildings and facilities, and vehicles and equipment; review annually and update as necessary
- Establish a written program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained in a timely manner
- Develop and implement a written SWPPP for maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes
- Develop, if not already developed, written procedures for sweeping streets and municipal-owned lots
- Develop, if not already developed, written procedures for winter road maintenance including storage of salt and sand
- Develop, if not already developed, a schedule for catch basin cleaning
- Develop, if not already developed, a written procedure for stormwater treatment structure maintenance
- Develop a written catchment investigation procedure (*18 months*)

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 in the last 5 years
- 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

Provide any additional details on activities planned for permit year 2 below:

Part V: Certification of Small MS4 Annual Report 2019**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:

Jeffrey P. Krockta, P.E.

Title:

Chief, Engineering Svc.

Signature:



[Signatory may be a duly authorized representative]

Date:

9/30/19