

**Year 6 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**New Permittees**  
**Reporting Period: July 1, 2023-June 30, 2024**

*\*\*Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are publicly accessible\*\**

*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, 2023 and June 30, 2024 unless otherwise requested.*

**Part I: Contact Information**

Name of Municipality or Organization: Westover Air Reserve Base

EPA NPDES Permit Number: MAR042051

**Primary MS4 Program Manager Contact Information**

Name: Champanine Saviengvong

Title: Environmental Engineer

Street Address Line 1: 250 Patriot Avenue

Street Address Line 2:

City: Chicopee

State: MA

Zip Code: 01022

Email: champanine.saviengvong@us.af.mil

Phone Number: (413) 557-3951

**Stormwater Management Program (SWMP) Information**

SWMP Location (web address): <https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>

Date SWMP was Last Updated: Jun 30, 2024

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.

<b><u>Impairment(s)</u></b>			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input checked="" type="checkbox"/> Nitrogen	<input type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
<b><u>TMDL(s)</u></b>			
<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 type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input checked="" type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">Clear Impairments and TMDLs</div>			

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 6 Requirements

Developed a report assessing current street design and parking lot guidelines and other local

- ☒ requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:

☒ No updates were recommended

☐ Updates were recommended. The anticipated date or date of completion for updates is/was:

Developed a report assessing local regulations to determine the feasibility of making green

- ☐ infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

☒ No updates were recommended

☐ Updates were recommended. The anticipated date or date of completion for updates is/was:

- ☒ Identified a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

1. New ISO Hangar
  2. Pavement removal area 1
  3. Pavement removal area 2
  4. Pavement removal area 3
  5. Dogpatch redevelopment

*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 following Permit Part 2.3.6.c requirement is NOT applicable to our site: Assess local regulations to determine the feasibility of making green infrastructure allowable.

Permit Part 5.1.3 states: Non-traditional MS4s do not need to meet the requirements of Part 2.3.6.c.

WARB is categorized as "non traditional" per Permit Part 1.1:

"State, federal, county and other publicly owned properties (Non-traditional) (MAR042000)."

#### 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 publicly available website:
- ☒ Updated the outfall and interconnection inventory and priority ranking as necessary
  - ☐ 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:

<https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>
- ☒ Updated system map due in year 5 as necessary
- ☒ 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
- ☒ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- ☒ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- ☒ Updated inventory of all permittee owned facilities as necessary
- ☒ O&M programs for all permittee owned facilities have been completed and updated as necessary
- ☒ Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- ☒ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- ☒ Inspected all permittee owned treatment structures (excluding catch basins)

*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:

## **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:

No Military Family Housing on Base. No residents with pets, thus giving educational materials to dog owners is not applicable. Westover has contract language to implement inspection and maintenance of septic tanks. SWMP Chapter 4.1.2. explains that Additional Education not needed for management of : pet waste and septic tanks.

## **Nitrogen** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

### Annual Requirements

#### *Public Education and Outreach\**

- ☒ Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
- ☐ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☐ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

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

#### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

#### *Nitrogen Source Identification Report*

- ☒ Completed the Nitrogen Source Identification Report
  - ☐ The Nitrogen Source Identification Report is attached to the email submission

- ☒ The Nitrogen Source Identification Report can be found at the following website:

<https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>

### *Structural BMPs*

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix F already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was

- ☒ estimated consistent with Attachment 1 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

- ☐ No BMPs were installed
- ☐ The BMP information is attached to the email submission
- ☒ The BMP information can be found at the following website:

<https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>

Total estimated nitrogen removed in lbs/year from the installed BMPs: 420.1

*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:

Fertilizer and grass clipping requirements stem from Permit Appendices F/H and is addressed by SWMP Chapter 4.1.2. State 310 CMR 19.017 bans the landfill, transfer, or combustion facilities from accepting yard waste. Westover does not landfill grass clippings or discharge it to stormwater. SWMP Chapter 4.1.2. explains that Additional Education not needed for management of : grass clippings, pet waste, and leaf litter.

### **Solids, Oil and Grease (Hydrocarbons), or Metals**

#### Annual Requirements

#### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads
- ☐ The street sweeping schedule is attached to the email submission
- ☒ The street sweeping schedule can be found at the following publicly available website:

<https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>

Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50

- ☒ percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings

*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:

Section 4.6.2 and 4.6.3 of this SWMP discusses Permit Appendix H requirement for Westover's increased frequencies for street sweeping and catch basin maintenance. Above requirements are fulfilled by SWMP BMP# 6d and 6f which includes the Catch Basin Cleaning Program and the Street and Parking Lot Sweeping Program.

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

### 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:

## 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: 1a - Industrial Users (including employees, tenants, and contractors)**

Message Description and Distribution Method:

- Face-to-face training of Marine Vehicle Repair Shop in October and November of 2019 on Spill Prevention and Response;
- Stormwater training for Aircraft Maintenance Group on 6 and 9 February 2020 (see slideshow in Appendix F of the SWMP); and
- Posted Environmental Management System Posters throughout base on stormwater and pollution prevention topics (see example poster in Appendix F of the SWMP).

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:

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### MCM2: Public Participation



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

The SWMP and Annual Report were posted online for public feedback. See BMP 2a and 2b in the Westover ARB SWMP.

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:**

### **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**

Percent of Phase II map complete:

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

**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:

<https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>

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

Number of outfalls screened:

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

Percent of outfalls screened:

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

Dry weather screening was completed for all regulated outfalls. No regulatory exceedences were detected and outfall ranking was updated.

**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:

*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:*

**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:

*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:

### **Employee Training**

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

Illicit Discharge Detection and Elimination training was prepared for and completed by relevant employees involved in the IDDE process.

### **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: 0

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

Site Plans Over One Acre (Taxiway G; Bio Bldg) were already reviewed in the past (Permit Year #5). Number of Sites needing inspections is 2 (New ISO Hangar project and Dogpatch); these two sites are inspected once per week. During the SWPPP annual evaluation, there was one active construction area (New ISO Hangar) that was evaluated by a third party environmental consulting firm for general stormwater practice compliance. No issues were identified.

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

### **Ordinance or Regulatory Mechanism**

Date ordinance was completed:

23 December 2020

Website of ordinance or regulatory mechanism:

[https://static.e-publishing.af.mil/production/1/af\\_a4/publication/afi32-1023/afi32-1023.pdf](https://static.e-publishing.af.mil/production/1/af_a4/publication/afi32-1023/afi32-1023.pdf)

### **As-built Drawings**

*Below, report on the number of as-built drawings received **during this reporting period**.*

Number of as-built drawings received: 0

*Optional:* Enter any additional information relevant to the submission of as-built drawings:

AFI 32-1023 Designing and Constructing Military Construction Projects Chapter 2.3.2 requires a comprehensive design and review process for all construction projects at Westover ARB, including submission of as-built drawings and development of operation and maintenance procedures. Additionally ETL 14-1 includes additional operation and maintenance requirements for projects. Both of these documents are enforced at Westover ARB. See BMP 5c in the Westover SWMP.

## **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: 408

Number of catch basins cleaned: 66

Total volume or weight of material removed from all catch basins: 210 cubic feet

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

Total number of catch basins: 1,457

*If applicable:*

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

N/A

### **Street Sweeping**

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

☒ Number of miles cleaned: 470

☐ Volume of material removed: [Select Units]

☐ Weight of material removed: [Select Units]

### **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: 0

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

Westover is covered under the MSGP and its associated SWPPP, which is not reportable on this Annual Report Form, thus the number of inspections is zero.

## **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**

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

Yes, I agree ☒

**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
- Update inventory of all known locations where SSOs have discharged to the MS4
- Sweep all curbed roadways at least once within the reporting period
- Annual training 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
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspections of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Implement SWPPPs for all permittee owned or operated maintenance garages, public works yards,

- transfer stations, and other waste handling facilities
- 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
  - Review O&M programs for all permittee owned facilities; update if necessary
  - Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
  - Enclose all road salt storage piles or facilities and implement winter road maintenance procedures to minimize the use of road salt
  - Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements

Provide any additional details on activities planned for permit year 7 below:

## Part VI: Certification of Small MS4 Annual Report 2024

### 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 B. Moriarty

Title:

Chief, Environmental Engineer

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](mailto:stormwater.reports@epa.gov)MassDEP: [Stormwater.DEP@mass.gov](mailto:Stormwater.DEP@mass.gov)

### Paper Signature:

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

[Print Signature Page](#)

*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.*

[Lock Form](#)