

**Joint Base Myer-Henderson Hall  
VSMP MS4 General Permit  
2023 Annual Report**

**Part I.D.2. General Information.**

- a. **Permittee:** Joint Base Myer-Henderson Hall (formerly known as U.S. Army Garrison Fort Myer)

**System Name:** Joint Base Myer-Henderson Hall MS4

**Permit Number:** MS4 General Permit VAR040068


- b. **Reporting Period:** 2022-2023 (Period of Report: 1 July 2022 – 30 June 2023)

c. **Signed 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, 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: Tasha N. Lowery

Title: COL, U.S. Army, Commanding, Joint Base Myer-Henderson Hall

Signature: LOWERY.TASHA.NICOLE.123 3503270  Digitally signed by  
LOWERY.TASHA.NICOLE.1233503270  
Date: 2023.09.26 15:21:15 -04'00'

Date: \_\_\_\_\_

- d. **Reporting for Minimum Control Measures (MCMs) No.1-6:** See Attachment 1.  
e. **Evaluation of the MS4 Program Implementation:** See Attachment 1.

**Part II.A.13 Chesapeake Bay TMDL Information**

- a. **BMPs not Reported to the BMP Warehouse:** All BMPs implemented through 30 June 2023 have been reported to the BMP Warehouse.
- b. **Credits:** No credits were acquired during this reporting period.
- c. **Progress Toward Meeting Required Reductions:** JBM-HH's progress toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids is presented in the table below.

**Joint Base Myer-Henderson Hall  
VSMP MS4 General Permit  
2023 Annual Report**

<b>BMPs</b>	<b>TN Removed (lbs/yr)</b>	<b>TP Removed (lbs/yr)</b>	<b>TSS Removed (lbs/yr)</b>	<b>Status</b>
<i>First Permit Cycle</i>				
Permeable Pavement Area – Special Events Area	4.23	0.59	264.39	Complete
Bioretention Area – Special Events Area	11.61	1.59	657.01	Complete
Building 406 Demolition	15.07	1.61	747.94	Complete
Bio-swale near Sheridan Ave and Pershing Dr.	3.94	0.57	269.98	Complete
Permeable Pavement near Sheridan Ave & Pershing Dr.	2.11	0.3	179.62	Complete
Bioswale near the Fitness Center Parking Lot	2.63	0.38	165.1	Complete
Bio-retention – East Lot Island	8.71	1.19	423.44	Complete
<i>Second Permit Cycle</i>				
Tennis Court Demolition and Conversion to Grass	5.59	0.00	1,624.40	Completed August 2023
Street Sweeping twice/week	33.72	8.1	13,650	Contract awarded, to begin Oct. 1
14 Tree Box Filter Units	27.31	4.14	3,913.65	Contract awarded, construction to begin Nov 2023
Fence Project BMPs (in excess of construction-related required reductions)	25.17	0.62	1,656.26	Completed June 2020
<b>Total Pollutant Removal*</b>	<b>143.46</b>	<b>19.9</b>	<b>24,916.79</b>	
<b>2028 Pollutant Goal (lb)</b>	<b>260.72</b>	<b>36.31</b>	<b>31,535.77</b>	
<b>% 2028 Goal*</b>	<b>55.02%</b>	<b>54.81%</b>	<b>79.01%</b>	

\*Figures reflect pollutant removals once street sweeping is implemented and construction of tree box filter units is complete.

**d. BMPs Planned for Next Reporting Period:**

- Conduct street/parking lot sweeping. JBM-HH DPW has established a street sweeping contract for sweeping at least 50 curb lane miles with a regenerative air street sweeper twice per week. The contract has been awarded and the sweeping will begin on October 1, 2023.
- Completion of installation for 14 tree box filter units on base. JBM-HH is working with USACE to implement these additional BMPs to meet the 2023 TMDL pollutant reduction goals. The contract for this project has been awarded and construction is set to begin in November 2023. This project was delayed due to difficulties in obtaining the funding for the project, staffing and resource shortages due to the COVID-19 pandemic, and necessary changes in the scope due to the limited available space for stormwater BMPs on base.
- Conversion of a 0.65-acre area of compacted ground formerly used as a horse paddock into a meadow (mixed open). Based on the compacted condition of

**Joint Base Myer-Henderson Hall  
VSMP MS4 General Permit  
2023 Annual Report**

the ground in this area, VADEQ Construction Division considers this to be impervious, which qualifies this conversion project as a Land Use Change BMP from impervious to mixed open.

**Part II.A.9 Local TMDL Information**

**Summary of Actions:**

The MS4 General Permit requires permittees to address pollutants for which the MS4 has been assigned a wasteload allocation (WLA) in an approved TMDL (other than the Chesapeake Bay TMDL). Because JBM-HH discharges to the Potomac River, the Installation is required to have a TMDL Action Plan for polychlorinated biphenyls (PCBs). The PCB TMDL Action Plan for JBM-HH was developed from March-July 2016 and submitted to the Virginia DEQ on 18 July 2016. The Plan was approved by DEQ in a letter dated 26 July 2016. The Plan was then updated in June 2023 to incorporate information on additional progress made with BMP implementation and the plan for further investigation of the Outfall 012/Long Branch Detention Basin area.

A summary of the implementation actions included in the PCB TMDL Action Plan and the progress for these actions is provided below:

Action	Progress
Develop a PCB fact sheet	To reach a wide audience of base-wide residents, employees, and military personnel (current and retirees) that utilize the services at JBM-HH, an article about PCBs and the PCB TMDL Action Plan was prepared and published in the widely-read base newspaper, the <i>Pentagram</i> . The article was published on March 7, 2017. Additionally, an article published in <i>The Pentagram</i> on July 2, 2022, on recognizing and reporting potential pollution concerns so that they may be promptly addressed included guidance on transformer leaks.
Continue to perform routine maintenance, as required, of BMPs that may help to control PCBs, such as detention basins	Routine maintenance of systems and BMPs that may help control PCBs is scheduled and performed as needed. JBM-HH has contracted with USACE to conduct annual inspections of all aboveground and underground structural BMPs at the Installation, which will more quickly identify issues and allow them to be addressed. JBM-HH has also established a Stormwater Management Facility (SMF) Maintenance Contract through NAVFAC Washington to conduct routine and non-routine maintenance on the majority of JBM-HH's BMPs during CY2023. As of May 2023, maintenance activities are ongoing. This contract will help to ensure proper routine maintenance of BMPs, as well as prompt addressing of issues noted during annual BMP inspections.
Develop PCB sampling plan to comply with PCB TMDL requirements	Three outfalls were identified in areas with historic PCB use for sampling. To date, all of the outfalls have been sampled twice. PCBs were detected in

**Joint Base Myer-Henderson Hall  
VSMP MS4 General Permit  
2023 Annual Report**

	<p>the most recent sample collected from Outfall 012. JBM-HH has coordinated for additional sampling to investigate this further. At this time, bottleware and sampling equipment has been prepared and staff plan to conduct the sampling during the next possible qualifying rain event.</p>
<p>Modify existing stormwater pollution prevention training materials for municipal operations to include a section on identifying and reporting potential PCB leaks</p>	<p>Annual stormwater pollution prevention training materials for Public Works employees were modified in 2017 to include PCB TMDL awareness, PCB source identification, and reporting information. This training is provided annually, with the most recent training sessions conducted on March 29 &amp; 30, 2023.</p>
<p>Update stormwater pollution prevention brochures to include basic facts about PCBs and the PCB TMDL and steps one should take if they observe oil leaking from a transformer. Distribute the brochures to new hires employed at JBM-HH</p>	<p>Due to operational changes caused by the Covid-19 pandemic, new hire packets are no longer distributed. Instead, a stormwater pollution prevention brochure geared towards employees was updated to include information on PCBs. These brochures have been distributed to staff at various facilities on base during JBM-HH Environmental Management Division's (EMD's) multi-media environmental compliance inspections on base. Additionally, an article published in The Pentagon on July 2, 2022, on recognizing and reporting potential pollution concerns so that they may be promptly addressed included guidance on transformer leaks.</p>

**Attachment 1 - VSMP MS4 General Permit 2022 Annual Report JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary								
DEQ Requested Information: Information regarding changes or updates to personnel.	In May 2023, the former Commander of Joint Base Myer-Henderson Hall, David D. Bowling, was replaced by Commander Tasha N. Lowery.								
<b>Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts</b>									
Part I.E.1.g(1): A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;	<p>The High-Priority WQ Issues at JBM-HH are:</p> <ul style="list-style-type: none"> <li>• Oil &amp; grease, hydrocarbons and related pollutants</li> <li>• Nutrients and bacteria from animal waste, fertilizers, etc.</li> <li>• Trash and litter</li> </ul> <p>These high-priority issues are addressed by activities as described below and in the Public Education and Outreach Plan, which is included as Appendix D of JBM-HH's MS4 Program Plan.</p>								
Part I.E.1.g(2): A list of the strategies used to communicate each high-priority stormwater issue.	<table border="1"> <thead> <tr> <th data-bbox="913 572 1106 626">High-Priority WQ Issue</th> <th data-bbox="1106 572 2893 626">Activity</th> </tr> </thead> <tbody> <tr> <td data-bbox="913 626 1106 828">Oil &amp; grease, hydrocarbons and related pollutants</td> <td data-bbox="1106 626 2893 828"> <ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Developed spill response factsheets and posted them in the DPW Storage Yard.</li> </ul> </td> </tr> <tr> <td data-bbox="913 828 1106 1165">Nutrients and Bacteria</td> <td data-bbox="1106 828 2893 1165"> <ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable. The brochures highlighted proper management of manure.</li> <li>• Developed and posted pollution prevention posters geared towards stables operations (particularly manure and sediment management) around the stables facilities.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on how JBM-HH is improving sustainability on base and how increasing the tree canopy protects stormwater and the local environment.</li> <li>• Developed brochures on animal waste management at the dog kennels on base.</li> </ul> </td> </tr> <tr> <td data-bbox="913 1165 1106 1411">Trash and Litter</td> <td data-bbox="1106 1165 2893 1411"> <ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Cassion Stables.</li> <li>• Developed and posted pollution prevention posters geared towards stables operations around the stables facilities. Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on how JBM-HH is improving sustainability on base and how increasing the tree canopy protects stormwater and the local environment.</li> </ul> </td> </tr> </tbody> </table>	High-Priority WQ Issue	Activity	Oil & grease, hydrocarbons and related pollutants	<ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Developed spill response factsheets and posted them in the DPW Storage Yard.</li> </ul>	Nutrients and Bacteria	<ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable. The brochures highlighted proper management of manure.</li> <li>• Developed and posted pollution prevention posters geared towards stables operations (particularly manure and sediment management) around the stables facilities.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on how JBM-HH is improving sustainability on base and how increasing the tree canopy protects stormwater and the local environment.</li> <li>• Developed brochures on animal waste management at the dog kennels on base.</li> </ul>	Trash and Litter	<ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Cassion Stables.</li> <li>• Developed and posted pollution prevention posters geared towards stables operations around the stables facilities. Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on how JBM-HH is improving sustainability on base and how increasing the tree canopy protects stormwater and the local environment.</li> </ul>
High-Priority WQ Issue	Activity								
Oil & grease, hydrocarbons and related pollutants	<ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Developed spill response factsheets and posted them in the DPW Storage Yard.</li> </ul>								
Nutrients and Bacteria	<ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable. The brochures highlighted proper management of manure.</li> <li>• Developed and posted pollution prevention posters geared towards stables operations (particularly manure and sediment management) around the stables facilities.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on how JBM-HH is improving sustainability on base and how increasing the tree canopy protects stormwater and the local environment.</li> <li>• Developed brochures on animal waste management at the dog kennels on base.</li> </ul>								
Trash and Litter	<ul style="list-style-type: none"> <li>• Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Cassion Stables.</li> <li>• Developed and posted pollution prevention posters geared towards stables operations around the stables facilities. Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on recognizing and reporting potential pollution concerns.</li> <li>• Published an article on JBM-HH's website on JBM-HH's Rainy Day Messages event and the importance of protecting the environment and preventing pollution.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on celebrating the holidays in more eco-friendly ways.</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's newspaper, on how JBM-HH is improving sustainability on base and how increasing the tree canopy protects stormwater and the local environment.</li> </ul>								
MCM Effectiveness and Necessary Changes	By developing and distributing numerous types of outreach materials, including newspaper articles, posters, and brochures, and distributing the materials to a wide variety of audiences, a large portion of JBM-HH's population was reached and the communication methods were believed to be successful. Table tents are usually distributed at DFAC, as well; however, the DFAC currently undergoing renovation and table tents will be reimplemented once the DFAC reopens. EMD is currently developing a survey that will target soldiers and will be distributed via the DFAC one it reopens. Additional surveys will be developed that target residents to evaluate education methods specific to housing.								
<b>Minimum Control Measure 2: Public Involvement/Participation</b>									
Part I.E.2.f(1): A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded;	No public input, including complaints, was received regarding the MS4 program.  EMD provides the public with several methods to comment on the Program Plan, report pollution concerns, or submit complaints to EMD. JBM-HH's Stormwater Pollution Prevention webpage provides an Environmental Incident Report Form, phone numbers, and an email address for the EMD and phone numbers for multiple EMD staff members are provided in brochures, table tents, and posters, as well as at the end of articles published in <i>The Pentagram</i> . If comments are received via telephone, the EMD staff member will record the comment in writing and collect the person's contact information. EMD will then respond to comments and complaints within one week. Records of comments/complaints and EMD responses are maintained for three years.								
Part I.E.2.f(2): A webpage address to the permittee's MS4 program and stormwater website;	<a href="https://home.army.mil/jbmhh/index.php/teamJBMHH/about/Base/stormwater-pollution-prevention-jbm-hh-1">https://home.army.mil/jbmhh/index.php/teamJBMHH/about/Base/stormwater-pollution-prevention-jbm-hh-1</a>								

<p>Part I.E.2.f(3): A description of the public involvement activities implemented by the permittee;</p> <p>Part I.E.2.f(4): A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality;</p>	The following public involvement/participation activities were held during this reporting year:		
	Activity	Metrics	Water Quality Benefits
	<ul style="list-style-type: none"> <li>Presented stormwater pollution prevention topics at the Environmental Quality Control Committee (EQCC) Meeting held on 24 January 2023 and provided information on stormwater issues to directors and managers of other departments and organizations on the Installation to be further disseminated among Installation staff.</li> </ul>	<p>Approximately ten representatives from various organizations across the Installation (including Environmental Management; Security; Public Affairs; Resource Management; Public Works; Human Resources; Police; Planning; and Family and Morale, Welfare and Recreation) attended the meeting.</p>	<p>Indirect benefits through awareness of stormwater pollution issues.</p>
	<ul style="list-style-type: none"> <li>Representatives of JBM-HH attended and presented at the Department of Defense (DoD) Chesapeake Bay Program (CBP) Commander's Conference held on 17 and 18 August 2022.</li> </ul>	<p>Three JBM-HH representatives attended. One representative presented at the conference on JBM-HH's BMPs.</p>	<p>Indirect benefits are provided through awareness of stormwater issues among Joint Base Commanders and their staff, as well as cooperation with other DoD installations to share strategies for implementing water quality BMPs and improvements.</p>
	<ul style="list-style-type: none"> <li>Representatives of JBM-HH attended the Department of Defense (DoD) Chesapeake Bay Action Team (CBAT) Meetings on 28 July 2022, 27 October 2022, 26 January 2023, and 27 April 2023.</li> </ul>	<p>Attendance at four meetings.</p>	<p>While these meetings do not constitute a public outreach or education activity for JBM-HH's "public," indirect benefits are provided through cooperation with other DoD installations to share strategies for implementing water quality BMPs and improvements.</p>
	<ul style="list-style-type: none"> <li>JBM-HH representatives participated in two VADEQ/DoD/EPA Partnership Meetings held on 10 August 2022 and 16 March 2023.</li> </ul>	<p>Attendance at two meetings.</p>	<p>Indirect benefits through cooperation with DEQ, EPA, and other DoD installations to discuss strategies for meeting applicable stormwater regulatory requirements, and to improve stormwater pollution prevention throughout Virginia.</p>
	<ul style="list-style-type: none"> <li>JBM-HH held two base-wide clean-up events during this reporting year. The Fall Clean-up Event was held from October 24 through 28, 2022 and the Spring Clean-up Event was held from April 24 through 28, 2023. As part of these events, the majority of the installation was divided up into areas of responsibility for 17 installation directorates and organizations. The key tasks involved in the clean-up event included the following: <ul style="list-style-type: none"> <li>Conduct clean-up within each organization, to include the outside area within 50 feet of buildings, barracks, and commercial spaces.</li> <li>Identify and turn-in excess property and unserviceable equipment.</li> <li>Utilize recycling locations as appropriate.</li> <li>Properly dispose of hazardous waste at designated collection points.</li> <li>Final inspection of the installation by senior leadership.</li> </ul> </li> </ul>	<p>Participation of 17 different installation directorates/organizations during two base-wide clean-up events.</p>	<p>Directly benefits water quality by removing trash, debris, chemicals, etc. from the environment and preventing these materials from entering waterways.</p> <p>Indirect benefits through awareness of stormwater pollution issues.</p>
	<ul style="list-style-type: none"> <li>JBM-HH collaborated with Arlington National Cemetery (ANC) on a clean-up event on June 6, 2023 for DoD's 2023 Clean the Bay Day. JBM-HH and ANC participants conducted a cleanup of areas along both sides of the JBM-HH/ANC property boundary. JBM-HH representatives then continued the Clean the Bay Day event in other areas of Fort Myer-Henderson Hall, including around several buildings and stormwater management facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Two JBM-HH participants</li> <li>Enough trash to fill approximately twelve large trash bags and several pieces of scrap metal were removed from areas around JBM-HH buildings and bioretention areas, as well as around the JBM-HH/ANC property boundary.</li> </ul>	<p>Directly benefits water quality by removing trash, debris, etc. from the environment and preventing these materials from entering waterways.</p> <p>Indirect benefits through awareness of stormwater pollution issues.</p>
<ul style="list-style-type: none"> <li>In September 2022, JBM-HH EMD conducted a public outreach event involving placing pollution prevention messages on sidewalks throughout the installation using a hydrophobic spray and large stencils with messages created by EMD staff. Messages were applied with an eco-friendly, nontoxic hydrophobic spray that repels water when wet, allowing messages to show when the sidewalks are wet from rain. A follow-up article on the messages and event was published on JBM-HH's website to further raise awareness on the importance of protecting stormwater and preventing pollution.</li> </ul>	<p>Twelve messages were placed around the installation and were visible for at least five months.</p>	<p>Indirect benefits through awareness of stormwater pollution issues.</p>	

**Attachment 1 - VSMP MS4 General Permit 2022 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary
Part I.E.2.f(5): The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.	Participants from JBM-HH collaborated with several participants from ANC during the DoD's 2023 Clean the Bay Day event on June 8, 2023. JBM-HH and ANC participants conducted a cleanup of areas along both sides of the JBM-HH/ANC property boundary. JBM-HH representatives then continued the Clean the Bay Day event in other areas of Fort Myer-Henderson Hall, including around several buildings and stormwater management facilities.  Additionally, information and strategies for public involvement opportunities were shared with other DoD installations during DoD CBAT meetings.
MCM Effectiveness and Necessary Changes	JBM-HH reached a large portion of the Installation's public through EQCC meetings, JBM-HH's Stormwater Pollution Prevention Webpage, multiple clean-up events, and more. No changes are deemed necessary at this time. EMD is currently in the process of planning public involvement activities for the next year (2024) as described in the MS4 Program Plan.
<b>Minimum Control Measure 3: Illicit Discharge Detection and Elimination</b>	
Part I.E.3.e(1): A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30, 2022;	The storm sewer system map was most recently updated in September 2023 to incorporate the tennis court demolition and conversion to grass and the changed use of the former lower paddock for the stables. The outfall information table was last updated in February 2023. No new outfalls, stormwater management facilities, or approved TMDLs were added during this permit year; therefore, updates to the map and outfall information table were not necessary. The map and outfall table will continually be updated as needed.
Part I.E.3.e(2): The total number of outfalls screened during the reporting period as part of the dry weather screening program;	All twenty-two outfalls were screened during this reporting period, with inspections occurring in April and June 2023.
Part I.E.3.f(3): A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows: (a) The source of the discharge; (b) The dates that the discharge was observed, reported, or both; (c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe); (d) How the investigation was resolved; (e) A description if any follow-up activities; and (f) The date the investigation was closed.	During dry-weather outfall inspections conducted in 2023, moderate flow was observed from Outfall 015. Trace amounts of ammonia and chlorine were detected in the flow, which was traced back to an area near Building 419 and the source was determined to likely be a small leak in a water pipe. EMD has been working with DPW to determine the exact location and repair the leak.
MCM Effectiveness and Necessary Changes	The Installation's outfall screening program is believed to be an effective means for identifying illicit discharges, should they occur. No changes to the current program are deemed to be necessary.
<b>Minimum Control Measure 4: Construction site stormwater runoff control</b>	
Part I.E.4.a: The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff.	EMD provides a document with standard language regarding stormwater requirements on base to the contracting personnel on base to be included in scopes of work and contracts. Additionally, EMD has updated the JBM-HH base-wide stormwater policy to include EMD's authority in requiring compliance and corrective actions when deficiencies are identified.  The EMD has created a Construction Inspection and Compliance Procedure, included as Appendix I in the MS4 Program Plan, that includes responsibilities and roles for construction compliance; legal authorities used to address discharges from construction sites; and procedures for ensuring contractors are aware of stormwater management requirements prior to construction, conducting construction site erosion and sediment control inspections, and addressing deficiencies noted during inspections.  EMD has also developed a Construction Project Coordination for Stormwater Requirements Standard Operating Procedure (SOP) that will provide additional information and guidance to DPW, USACE, contractors, and other installation organizations involved in construction projects on the JBM-HH-specific process for ensuring construction projects comply with state and base-specific stormwater requirements.
Part I.E.4.d(1): (a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control; and (b) If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.	JBM-HH's construction site stormwater runoff program is implemented in accordance with Part I.E.4.a.(4); JBM-HH is a federal entity that has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law and Regulations. Virginia DEQ is the permit review and issuing authority for erosion and sediment control plans and Construction General Permits, as JBM-HH is a federal entity. There were no qualifying construction project during this reporting period.  Though not required, as an additional safeguard to help make sure that activities at JBM-HH comply with stormwater regulations, EMD conducts preliminary reviews of proposed construction projects on base and provides guidance on whether or not a CGP, DEQ-approved E&SC Plan, and/or DEQ-approved Stormwater Management Plan is required. EMD had developed a Construction Project Reviews SOP to establish the procedures for these extra reviews.
Part I.E.4.d(2): Total number of inspections conducted;	One DEQ-permitted project began at JBM-HH in June 2023 (the tennis court demolition and conversion to grass). By then end of this reporting year (June 30, 2023), two inspections were conducted of the site. These inspections continued until completion of the project in August 2023, which will be included on the next annual report.

**Attachment 1 - VSMP MS4 General Permit 2022 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

<b>Permit Section: Requirement</b>	<b>Implementation/Progress Summary</b>
Part I.E.4.d(3): The total number and type of enforcement actions implemented and the type of enforcement actions.	No enforcement actions were deemed necessary during this reporting year.
MCM Effectiveness and Necessary Changes	The Installation's program and procedures for stormwater compliance and monitoring of construction projects appear to be effective at controlling the stormwater runoff from construction sites. No changes to the current program are deemed to be necessary, though EMD is always working to identify ways to continuously improve the program.
<b>Minimum Control Measure 5: Post-construction stormwater management in new development and development on prior developed lands</b>	
Part I.E.5.i(1): If the permittee implements a Virginia Stormwater Management Program in accordance with Part I.E.5.a(1) and (2): (a) The number of privately owned stormwater management facility inspections conducted; and (b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;	JBM-HH is a military installation. Inspection and maintenance of all stormwater management facilities (SMFs) on the Installation is the responsibility of the DPW. Maintenance issues are managed through the DPW work order process and through an established maintenance contract; enforcement actions are not applicable. SOPs have been developed for all SMFs on the Installation that include checklist forms to document the inspections and maintenance. In 2018, DPW contracted USACE to conduct inspections of SMFs across the installation on a routine basis. The USACE Inspection Team conducted inspections of 21 aboveground SMFs on 7 September 2022 and five underground SMFs on 8 September 2022. The EMD is responsible for maintaining completed documentation received from USACE. Additionally, EMD and DPW have established an SMF Maintenance Contract to ensure SMFs are regularly maintained by qualified personnel.
Part I.E.5.i(2): Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;	In 2018, DPW hired USACE to conduct inspections of SMFs across the installation on a routine basis. During this reporting period, the USACE Inspection Team conducted inspections of 26 SMFs in September 2022. All of JBM-HH's SMFs were inspected during this reporting period. The EMD is responsible for maintaining completed documentation received from USACE.
Part I. E.5.i(3): A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;	As stated above, EMD and DPW have established an SMF Maintenance Contract to ensure SMFs are regularly maintained by qualified personnel. During this reporting year, significant maintenance, repair, or retrofit activities were performed on SMFs during this reporting year. These activities included the following: <ul style="list-style-type: none"> <li>• Replacing the filter media and plants in all of JBM-HH's Filterra units.</li> <li>• Removing and replacing the top 4-inch layer of silty sand filter media in the TOG sand filter. Also repairing a broken overflow pipe.</li> <li>• Removal of a large amount of excessive vegetation and accumulated sediment from the Long Branch Detention Basin and repairing a concrete inlet.</li> <li>• Repairing concrete cracks in the Building 205 extended detention basin.</li> </ul> Additionally, routine maintenance was conducted on numerous BMPs on base.
Part I.E.5.i(4): A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I.E.5.f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities;	No DEQ-permitted projects were completed at JBM-HH during this reporting year. One project began in June 2023 but involved only the removal of impervious surface and conversion of the area to grass; therefore, no stormwater management facilities were required to be implemented for this project.
Part I.E.5.i(5): A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I.E.5.g and the date on which the information was submitted.	A JBM-HH representative will report BMPs to the DEQ Warehouse by 1 October 2023.
MCM Effectiveness and Necessary Changes	JBM-HH's BMP inspection program and tracking has been successfully improved by contracting with USACE to conduct inspections. During permit year 2022, EMD successfully established a BMP maintenance contract and routine and non-routine maintenance has been conducted on BMPs across the installation. These efforts will continue in the permit year 2023.
<b>Minimum Control Measure 6: Pollution prevention/good housekeeping for municipal operations</b>	
Part I.E.6.q(1) A summary of any operational procedures developed or modified in accordance with Part I.E.6(a) during the reporting period;	SOPs for DPW activities were developed during the 2021 permit term and were disseminated to the appropriate DPW departments. Training efforts have been expanded to focus on good housekeeping and pollution prevention at the Installation's maintenance-related facilities. EMD is also working on developing a standardized set of factsheets for employees at JBM-HH to provide quick and easy reference guides and ensure continued compliance. Factsheets developed this year include topics on Spill Response, Hazardous Waste Management, Universal Waste Management, and Recognizing and Reporting Pollution Concerns.  EMD has also identified/established Environmental Coordinators for various buildings on base, each of whom will have the responsibility for maintaining environmental compliance for their respective building.
Part I.E.6.q(2): A summary of any new SWPPPs developed in accordance with Part I.E.6.c during the reporting period;	No new SWPPPs have been developed during this reporting year.



**Attachment 1 - VSMP MS4 General Permit 2022 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary
Part I.E.6.q(3): A summary of any SWPPPs modified in accordance with Part I.E.6.f or the rationale of any high priority facilities delisted in accordance with Part I.E.6.h during the reporting period;	A JBM-HH SWPPP that addresses all municipal operations for the Installation was originally prepared to comply with the Installation's VPDES Industrial Stormwater Permit. This SWPPP has been implemented since 2009 and is updated annually. The SWPPP was revised in June 2022 to reflect minor changes to potential stormwater pollution sources, update facility contact information, and update the figures. No high-priority areas were delisted during this reporting period. The Caisson Stables was determined to be a high-priority facility during the previous reporting year and, as mentioned above, a SWPPP was developed and implemented for this facility.
Part I.E.6.q(4): A summary of any new turf and landscape nutrient management plans developed that includes: (a) Location and the total acreage of each land area; and (b) The date of the approved nutrient management plan.	No new turf and landscaped NMPs were developed during this reporting period. Turf and landscaped areas at the Installation are generally limited to small maintained yards and landscaped areas surrounding residences and buildings. The only large managed turf area is the Summerall Field. This area is approximately 9 acres and is used for ceremonies, parades, and other similar activities. The coordinates for this area are: N38.881746, E-77.081838. The need for a nutrient management plan was previously evaluated and it was determined that because nutrients were not being applied to Summerall Field or any other areas of the Installation, a nutrient management plan was not required. If EMD determines that turf and landscape management practices have changed, a plan will be developed in accordance with the permit conditions.
Part I.E.6.q(5): A list of the training events conducted in accordance with Part I.E.6.m, including the following information: (a) The date of the training event; (b) The number of employees who attended the training event; and (c) The objective of the training event.	<p>During this reporting year, approximately 40 employees and active-duty military personnel assigned to motor pool maintenance, stables operations, and DPW maintenance activities completed required training that addresses stormwater pollution prevent and spill prevention, control and countermeasures (SPCC), illicit discharge detection and elimination. During this reporting year, two training sessions were provided via Microsoft Teams for these employees on March 29 and 30, 2022.</p> <p>The objective of the training is to address good housekeeping and pollution prevention by providing an understanding of the environmental issues and methods used to address these issues. The training includes, but is not limited to, the following topics:</p> <ul style="list-style-type: none"> <li>• How JBM-HH activities can impact the local environment;</li> <li>• How state and federal regulations apply to activities at JBM-HH;</li> <li>• Identifying opportunities to prevent pollution and use sustainable practices;</li> <li>• Environmental risks associated with employee's duties;</li> <li>• Methods for reducing environmental impacts;</li> <li>• Spill prevention and response; and</li> <li>• Illicit discharge detection and elimination.</li> <li>• Good housekeeping and pollution prevention practices for DPW operations (including roadway and parking lot maintenance and pollutant minimization practices)</li> <li>• PCB TMDL required topics</li> </ul>
Part I.E.6.k: The permittee shall not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved areas.	JBM-HH DPW does not apply deicing agents containing urea, nitrogen, or phosphorus. Brine (a simple mixture of salt and water) and magnesium chloride salt are applied to roadways, sidewalks, and other paved areas on base. Additionally, bags of Safer Than Salt® are provided to residents and certain facilities on base to use when necessary.
MCM Effectiveness and Necessary Changes	Improvements in good housekeeping for areas with municipal operations were observed during this reporting year. Though this portion of the program was determined to be successful, EMD will continue to work on improving good housekeeping measures on base by conducting regular inspections and working with the responsible parties if deficiencies are identified. Additionally, EMD has identified/established Environmental Coordinator positions for various buildings on base, in order to have one person with established responsibility for environmental compliance for each building.