Joint Base Myer-Henderson Hall
VSMP MS4 General Permit
2021 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: 2020-2021 (Period of Report: 1 July 2020 – 30 June 2021)

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: David D. Bowling
Title: COL, Special Forces, Commanding, Joint Base Myer-Henderson Hall

Signature: BOWLING.DAVID.DARRELL.1135102829 Digitally signed by BOWLING.DAVID.DARRELL.1135102829 Date: 2021.09.22 09:16:17 -04'00'

Date: 22 SEP 21

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 2021 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.

First Permit Cycle BMPs	TN Removed (lbs/yr)	TP Removed (lbs/yr)	TSS Removed (lbs/yr)
Permeable Pavement Area – Special Events Area	4.23	0.59	264.39
Bioretention Area – Special Events Area	11.61	1.59	657.01
Building 406 Demolition	15.07	1.61	747.94
Bio-swale near Sheridan Ave and Pershing Dr.	3.94	0.57	269.98
Permeable Pavement near Sheridan Ave and Pershing Dr.	2.11	0.3	179.62
Bioswale near the Fitness Center Parking Lot	2.63	0.38	165.1
Bio-retention – East Lot Island	8.71	1.19	423.44
Total Pollutant Removal	**48.3**	**6.23**	**2,707.48**
2028 Pollutant Goal (lb)	**260.72**	**36.31**	**31,535.77**
% 2028 Goal	**21.05%**	**23.91%**	**19.07%**

d. BMPs Planned for Next Reporting Period:

- Conduct street/parking lot sweeping. A pilot program for street sweeping twice per week using in-house DPW staff was initiated in 2020; this program will be continued and evaluated for long-term viability.
- JBM-HH is currently working with USACE to plan and implement additional BMPs to meet the 2023 TMDL pollutant reduction goals. These BMPs include tree box filter units and bioretention areas.

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.

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 *Pentagram.* The article was

	published on March 7, 2017. An additional fact sheet is in progress and will be distributed as appropriate.
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.
Develop PCB sampling plan to comply with PCB TMDL requirements	A PCB sampling plan was included in the PCB TMDL Action Plan that identified three outfalls in areas with historic PCB use for sampling. To date, two of the outfalls (013 and 021) have been sampled twice and one outfall (012) has been sampled once. There were no PCBs detected in any of the samples collected to date. Issues with access have prevented the collection of a second sample at outfall 012. This outfall will be sampled when access can be reobtained.
Modify existing stormwater pollution prevention training materials for municipal operations to include a section on identifying and reporting potential PCB leaks	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.

Attachment 1 - VSMP MS4 General Permit 2021 Annual Report
JBM-HH Minimum Control Measure Progress Evaluation

<table>
<tr><th>Permit Section: Requirement</th><th>Implementation/Progress Summary</th></tr>
<tr><td>DEQ Requested Information: Information regarding changes or updates to personnel.</td><td>In May 2021, the former Commander of Joint Base Myer-Henderson Hall, Kimberly A. Peeples, was replaced by Commander David D. Bowling.</td></tr>
<tr><td colspan="2">Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts</td></tr>
<tr><td>Part I.E.1.g(1): A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;</td><td>The High-Priority WQ Issues at JBM-HH are:
• Oil & grease, hydrocarbons and related pollutants
• Nutrients and bacteria from animal waste, fertilizers, etc.
• Trash and litter
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.</td></tr>
<tr><td>Part I.E.1.g(2): A list of the strategies used to communicate each high-priority stormwater issue.</td><td>
<table>
<tr><th>High-Priority WQ Issue</th><th>Activity</th></tr>
<tr><td>Oil & grease, hydrocarbons and related pollutants</td><td>• Distributed Stormwater Pollution Prevention brochures geared towards staff of dining facilities and restaurants, which were distributed to the Panda Express staff.
• Distributed general Stormwater Pollution Prevention brochures to staff across the installation during EMD’s Multi-media Environmental Compliance Inspections.
• Published three articles in the Pentagram, JBM-HH’s weekly newspaper, regarding recycling at JBM-HH (America Recycles Day), potential environmental impacts of deicing materials and how to mitigate the impacts, and JBM-HH’s cleanup efforts as part of the Clean the Bay Day event and the importance of keeping the installation clean to protect the Chesapeake Bay.</td></tr>
<tr><td>Nutrients and Bacteria</td><td>• Distributed general Stormwater Pollution Prevention brochures to staff across the installation during EMD’s Multi-media Environmental Compliance Inspections.
• Obtained dog waste bag stations that include signage, bags, and waste receptacles.
• Revise animal waste management brochures for stables and kennels and distribute to staff at those facilities (to be done in late 2021/early 2022)
• Publish article in the Pentagram, JBM-HH’s weekly newspaper, regarding nutrients, their sources, and their effects on the Chesapeake Bay (to be done in late 2021/early 2022).
• Prepare informational handouts for distribution at Installation facilities that sell fertilizer regarding the importance of proper fertilizer application to protect water quality (to be done in Spring 2022).
• Discuss fertilizer use with DPW and associated landscaping contractor to evaluate current practices and applicable and educate them on proper application of fertilizers to protect water quality.</td></tr>
<tr><td>Trash and Litter</td><td>• Posted cigarette butt litter prevention posters around the barracks across the installation.
• Created and distributed Stormwater Pollution Prevention brochures geared towards staff of dining facilities and restaurants, which were distributed to the Panda Express staff.
• Published three articles in the Pentagram, JBM-HH’s weekly newspaper, regarding recycling at JBM-HH (America Recycles Day), potential environmental impacts of deicing materials and how to mitigate the impacts, and JBM-HH’s cleanup efforts as part of the Clean the Bay Day event and the importance of keeping the installation clean to protect the Chesapeake Bay.</td></tr>
</table>
</td></tr>
<tr><td>MCM Effectiveness and Necessary Changes</td><td>By developing and distributing numerous types of outreach materials, including newspaper articles, brochures, and posters, 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, they were not distributed this year due to base and facility access restrictions during the COVID-19 pandemic. Additionally, a survey evaluating the effectiveness of the education and outreach efforts was to be distributed in 2020 but has been delayed until 2022 due to the ongoing public health crisis. EMD is currently evaluating means and methods to distribute a survey that will target specific audiences, including soldiers using the DFAC on base and Installation residents.</td></tr>
<tr><td colspan="2">Minimum Control Measure 2: Public Involvement/Participation</td></tr>
<tr><td>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;</td><td>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 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 The Pentagram. 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.</td></tr>
<tr><td>Part I.E.2.f(2): A webpage address to the permittee’s MS4 program and stormwater website;</td><td>https://home.army.mil/jbmhh/index.php/teamJBMHH/about/Base/stormwater-pollution-prevention-jbm-hh-1</td></tr>
</table>

Part I.E.2.f(3): A description of the public involvement activities implemented by the permittee;

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;

The following public involvement/participation activities were held during this reporting year:

Activity	Metrics	Water Quality Benefits
• Presented stormwater pollution prevention topics at the Environmental Quality Control Committee (EQCC) Meetings held on 21 October 2020 and 7 December 2020, and provided information on stormwater issues to directors and mangers of other departments and organizations on the Installation to be further disseminated among Installation staff.	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 meetings.	Indirect benefits through awareness of stormwater pollution issues.
• Representatives of JBM-HH attended the Department of Defense (DoD) Chesapeake Bay Action Team (CBAT) Meetings on 23 July 2020 and 29 April 2021.	Attendance at two meetings.	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.
• JBM-HH representatives participated in two VADEQ/DoD/EPA Partnership Meetings held on August 11, 2020 and February 10, 2021.	Attendance at two meetings.	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.
• JBM-HH's Stormwater Pollution Prevention webpage was updated. The webpage includes a description of JBM-HH's MS4, information on preventing stormwater pollution, the MS4 Program Plan, the most recent MS4 Annual report, the MS4 General Permit, the Chesapeake Bay TMDL Action Plan, the PCB TMDL Action Plan, stormwater pollution prevention articles previously published in the *Pentagram*, and an Environmental Incident Report for the public to use to report spills, leaks, or other environmental concerns. The recent website updates included providing additional information and guidance for the public to give input on JBM-HH's MS4 Program Plan and a method for the public to report spills, pollution concerns, etc.	N/A	Indirect benefits through awareness of stormwater pollution issues. Improved process for the public to report spills and pollution concerns would help EMD identify and therefore address these issues in a more timely manner.
• JBM-HH held two base-wide clean-up events during this reporting year. The Fall Clean-up Event was held on October 8 and 9, 2020 and the Spring Clean-up Event was held from May 24 through 28, 2021. 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: o Conduct clean-up within each organization, to include the outside area within 50 feet of buildings, barracks and commercial spaces. o Identify and turn-in excess property and unserviceable equipment. o Utilize recycling locations as appropriate. o Properly dispose of hazardous waste at designated collection points. o Final inspection of the installation by senior leadership.	Participation of 17 different installation directorates/organizations during two base-wide clean-up events.	Directly benefits water quality by removing trash, debris, chemicals, etc. from the environment and preventing these materials from entering waterways. Indirect benefits through awareness of stormwater pollution issues.
• JBM-HH collaborated with Arlington National Cemetery (ANC) on a clean-up event on June 4, 2021 for DoD's 2021 Clean the Bay Day. JBM-HH and ANC participants conducted a cleanup of areas along both sides of the JBM-HH/ANC property boundary. As a result of the joint cleanup in this area, approximately 245 pounds of trash in seven large bags and approximately 1 cubic yard of scrap metal was removed from this area. 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. As a result of the cleanup in these areas, enough trash to fill approximately six large bags and several larger pieces of scrap metal were removed and prevented from further impacting the environment.	• Four JBM-HH participants • ~245 pounds of trash in 7 large bags and ~1 cubic yard of scrap metal removed from the targeted JBM-HH/ANC fence line area • Six large bags of trash and several large pieces of scrap metal removed from areas around JBM-HH buildings and bioretention areas	Directly benefits water quality by removing trash, debris, etc. from the environment and preventing these materials from entering waterways. Indirect benefits through awareness of stormwater pollution issues.
• JBM-HH generally holds annual environment events around Earth Day, including a paper shredding and recycling event and a hazardous materials collection event. However, because of the COVID-19 pandemic, these events were not held this year.	N/A	N/A

Attachment 1 - VSMP MS4 General Permit 2021 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.	Four participants from JBM-HH collaborated with several participants from ANC during the DoD's 2021 Clean the Bay Day event on June 4, 2021. JBM-HH and ANC participants conducted a cleanup of areas along both sides of the JBM-HH/ANC property boundary. As a result of the joint cleanup in this area, approximately 245 pounds of trash in seven large bags and approximately 1 cubic yard of scrap metal was removed from this area. 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. As a result of the cleanup in these areas, enough trash to fill approximately six large bags and several larger pieces of scrap metal were removed and prevented from further impacting the environment. Additionally, information and strategies for public involvement opportunities were shared with other DoD installations during DoD CBAT meetings.
MCM Effectiveness and Necessary Changes	Despite the difficulties caused by the ongoing COVID-19 pandemic, JBM-HH reached a large portion of the Installation's public through EQCC meetings, JBM-HH's Stormwater Pollution Prevention Webpage, and multiple clean-up events. Unfortunately, due to the ongoing public health crisis, certain planned public involvement activities were unable to be held during this permit year. EMD remains committed to the public outreach aspect of pollution prevention and is working to brainstorm and develop additional methods to reach the public during the current public health crisis. EMD is currently in the process of planning public involvement activities for the next year (2022) as described in the MS4 Program Plan and has several ideas for public outreach activities that can be conducted in a safe manner.
Minimum Control Measure 3: Illicit Discharge Detection and Elimination	
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, 2021;	The storm sewer system map and outfall information table were last updated in November 2020. Updates to the map included adding labels for discharge pathways and interconnections for outfalls. Additional information has been added to the outfall information table. 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;	Twenty-one outfalls were screened during this reporting period, with inspections occurring in June 2021. JBM-HH previously had 23 outfalls to inspect; however, due to recent property changes, one of the outfalls is now on Arlington National Cemetery (ANC) property. One outfall could not be screened due to access restriction. Additionally, as a result of changes made to the perimeter security fence, one outfall was unable to be accessed due to activities associated with the Perimeter Security Fence Project.
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.	On June 8, 2021, the EMD was notified by a JBM-HH O&M Supervisor that the main chilled water line in Building 241 ruptured and the entire chilled water system (capacity of 800 gallons) was drained. An unknown amount had entered the storm system through drains via the building's sump pump system. The Virginia Emergency Operation Center was notified of the release. PIG absorbent socks were used to block the drains in the mechanical room and absorbent pads were used to soak up remaining glycol. The used materials were collected in bags and properly disposed. According to the SDS, the glycol mixture was a food-grade, non-toxic mixture of 70% water and 30% glycol, and that no Reportable Quantity (RQ) thresholds were exceeded for its components, as listed on EPA's Consolidated List of Chemicals. EMD submitted a written report of the discharge event to Ms. Anna Tuthill, VADEQ, on June 22, 2021, at which time the investigation was considered closed. Efforts to prevent a similar discharge in the future include presenting on the discharge event during EQCC meetings to raise awareness and ensuring spill kits are properly stocked with clean materials and located within the mechanical room of Building 241 and in other key locations throughout the installation.
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.
Minimum Control Measure 4: Construction site stormwater runoff control	
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.

Attachment 1 - VSMP MS4 General Permit 2021 Annual Report JBM-HH Minimum Control Measure Progress Evaluation	
Permit Section: Requirement	**Implementation/Progress Summary**
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 was one qualifying construction project during this reporting period; EMD conducted construction site E&SC inspections for this project in accordance with Part I.E.4.a.(4) of the MS4 permit. 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 occurred at JBM-HH during this reporting year: the Perimeter Security Fence project, which involved replacing the fencing along the eastern property boundary of the Installation with a more secure fence. During this reporting year, EMD conducted 9 inspections of the Perimeter Security Fence Project Site, which included biweekly inspections, post-rain event inspections, and a project completion inspection.
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 determined to be necessary during this reporting period. When deficiencies in erosion and sediment controls were observed during EMD's construction project inspections, the project manager/contractor were notified and corrective actions were promptly implemented to address the issues.
MCM Effectiveness and Necessary Changes	The development of the construction inspection and compliance procedures was successful. Inspections were conducted at the required intervals and the project team implemented corrective actions for erosion and sediment control issues that EMD identified in a prompt manner. No changes are deemed necessary, though EMD is continuously working to improve the construction project stormwater compliance program on base.
Minimum Control Measure 5: Post-construction stormwater management in new development and development on prior developed lands	
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; 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 22 aboveground SMFs on September 1 and 23, 2020 and four underground SMFs on September 1 and 23, 2020. The EMD is responsible for maintaining completed documentation received from USACE. EMD coordinated with a base contractor to conduct routine maintenance on two of the SMFs, which was completed on December 22, 2020. Additionally, EMD and DPW are working to establish an SMF Maintenance Contract to ensure SMFs are regularly maintained by qualified personnel. Though funding issues have cause delays in these efforts, a contract is expected to be in place by mid-2022.
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 2020. 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;	No significant maintenance, repair, or retrofit activities were performed on SMFs during this reporting year. EMD is working to identify the appropriate, qualified contractor to conduct the necessary maintenance for Filterra units on base, as well as a wet pond. As stated above, EMD and DPW are working to establish an SMF Maintenance Contract to ensure SMFs are regularly maintained by qualified personnel. Though funding issues have cause delays in these efforts, a contract is expected to be in place by mid-2022.
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;	One DEQ-permitted project occurred at JBM-HH during this reporting year: the Perimeter Security Fence project, which involved replacing the fencing along the eastern property boundary of the Installation with a more secure fence. The project team is in the process of finalizing the as-builts to complete the project. The stormwater management facilities installed for this project will be reported to DEQ through submission of the NOT when the project is completed.
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 30 September 2021.

Attachment 1 - VSMP MS4 General Permit 2021 Annual Report JBM-HH Minimum Control Measure Progress Evaluation	
Permit Section: Requirement	**Implementation/Progress Summary**
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 2021, EMD has continued working on establishing BMP maintenance contracts, rather than continuing to rely on in-house staff to address deficiencies. These efforts will continue in the permit year 2022, with a contract expected to be in place by mid-2022.
Minimum Control Measure 6: Pollution prevention/good housekeeping for municipal operations	
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 previous 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. No new standard operating procedures were developed during this reporting year. Additionally, on top of the routine SWPPP inspections conducted at the high-priority facilities on base, EMD has begun conducting multi-media compliance inspections of facilities across the installation. These inspections will help identify potential pollution concerns, as well as opportunities for improving good housekeeping practices throughout the installation. EMD has 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 were developed this reporting period.
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 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 2021 to reflect minor changes to potential stormwater pollution sources, remove references to the terminated Industrial Stormwater Permit, update facility contact information, and update the Joint Base Commander. No high-priority areas were delisted during this reporting period.
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.	During this reporting year, approximately 30 employees and active duty military personnel assigned to motor pool maintenance 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, four training sessions were provided via Microsoft Teams for these employees on March 10 and 11, 2021. 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: • How JBM-HH activities can impact the local environment; • How state and federal regulations apply to activities at JBM-HH; • Identifying opportunities to prevent pollution and use sustainable practices; • Environmental risks associated with employee's duties; • Methods for reducing environmental impacts; • Spill prevention and response; and • Illicit discharge detection and elimination. • Good housekeeping and pollution prevention practices for DPW operations (including roadway and parking lot maintenance and pollutant minimization practices) • PCB TMDL required topics
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	Good housekeeping training efforts were expanded this year and improvements in good housekeeping for areas with municipal operations were observed. 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.