

**Joint Base Myer-Henderson Hall  
VSMP MS4 General Permit  
2020 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:** 2019-2020 (Period of Report: 1 July 2019 – 30 June 2020)

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: Kimberly A. Peoples

Title: COL, Engineer, Commanding, Joint Base Myer-Henderson Hall

Signature: 85  
PEEPLES.KIMBERLY.ANNE.10763144  
Digitally signed by PEEPLES.KIMBERLY.ANNE.1076314485  
Date: 2020.09.02 18:06:09 -04'00'

Date: 2 Sept 2020

- 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 2020 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.

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<b>First Permit Cycle BMPs</b>	<b>TN Removed (lbs/yr)</b>	<b>TP Removed (lbs/yr)</b>	<b>TSS Removed (lbs/yr)</b>
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
Street Sweeping (SCP-4, every 4 weeks)	6.57	2.45	3,306.42
<b>Total Pollutant Removal</b>	<b>54.87</b>	<b>8.68</b>	<b>6,013.9</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>21.05%</b>	<b>23.91%</b>	<b>19.07%</b>

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

- Continue 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.

**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:

<b>Action</b>	<b>Progress</b>
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. An additional fact sheet is in progress and will be distributed as appropriate.

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<p>Continue to perform routine maintenance, as required, of BMPs that may help to control PCBs, such as detention basins</p>	<p>Routine maintenance of systems and BMPs that may help control PCBs is scheduled and performed as needed.</p>
<p>Develop PCB sampling plan to comply with PCB TMDL requirements</p>	<p>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.</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.</p>

**Attachment 1 - VSMP MS4 General Permit 2020 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 July 2019, the former Water Program Manager Greg Olmsted retired and was replaced by Tony Taylor.									
<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>• Sediment</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. Note: These high-priority water quality issues are being reevaluated and revised for the next reporting year. Sediment will likely be replaced with a different water quality issue with more relevance to JBM-HH's public.</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="997 602 1174 657">High-Priority WQ Issue</th> <th data-bbox="1193 602 2896 657">Activity</th> </tr> </thead> <tbody> <tr> <td data-bbox="997 663 1174 899">Oil &amp; grease, hydrocarbons and related pollutants</td> <td data-bbox="1193 663 2896 899"> <ul style="list-style-type: none"> <li>• Created and distributed Stormwater Pollution Prevention brochures for the public, which were distributed among waiting rooms at the Radar Clinic.</li> <li>• Created and distributed Stormwater Pollution Prevention brochures geared towards staff of dining facilities and restaurants, which were distributed at the Installation's Dining Facility (DFAC).</li> <li>• Published an article in the <i>Pentagram</i>, JBM-HH's weekly newspaper, regarding the purpose and function of the recently constructed stormwater management facilities at JBM-HH installed to help reach the Chesapeake Bay TMDL goals, in order to spread awareness of stormwater pollution and to protect the new stormwater BMPs by encouraging the public not to walk through the bioretention areas and bioswales.</li> <li>• Published an article in the DoD Chesapeake Bay Program Winter Journal on JBM-HH's stormwater BMPs, progress in meeting the Chesapeake Bay TMDL goals, and status and methods of developing a BMP inspection and maintenance program.</li> </ul> </td> </tr> <tr> <td data-bbox="997 905 1174 1141">Sediment</td> <td data-bbox="1193 905 2896 1141"> <ul style="list-style-type: none"> <li>• Created and distributed Stormwater Pollution Prevention brochures for the public, which were distributed among waiting rooms at the Radar Clinic.</li> <li>• Created and distributed Stormwater Pollution Prevention brochures geared towards staff of dining facilities and restaurants, which were distributed at the Installation's Dining Facility (DFAC).</li> <li>• Published an article in the 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MCM Effectiveness and Necessary Changes	By developing and distributing numerous types of outreach materials, including newspaper articles 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, 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 2021 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.									
<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 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 with 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>									

**Attachment 1 - VSMP MS4 General Permit 2020 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary		
<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) Meetings held in 16 October 2019 and 12 May 2020, 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>	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.
	<ul style="list-style-type: none"> <li>Representatives of JBM-HH attended the Department of Defense (DoD) Chesapeake Bay Action Team (CBAT) Meetings on 25 July 2019, 24 October 2019, 23 January 2020, and 23 April 2020.</li> </ul>	Attendance at four 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.
	<ul style="list-style-type: none"> <li>Two JBM-HH representatives attended the EPA Region III and VA DEQ MS4 Forum on October 21-23, 2019.</li> </ul>	Two JBM-HH representatives attended all three days with numerous other MS4 permittees in Virginia.	Indirect benefits through cooperation with DEQ and other MS4 operators to discuss strategies for implementing water quality BMPs and share knowledge and lessons learned in MS4 program implementation, to improve stormwater pollution prevention throughout Virginia.
	<ul style="list-style-type: none"> <li>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 <i>Pentagram</i>, and an Environmental Incident Report for the public to use to report spills, leaks, or other environmental concerns.</li> </ul>	N/A	Indirect benefits through awareness of stormwater pollution issues.
	<ul style="list-style-type: none"> <li>JBM-HH generally holds annual environment events around Earth Day, including a base-wide cleanup day, 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. JBM-HH will look into the possibility of holding these events in the Fall of 2020 or the Spring of 2021, depending on the state of the public health crisis.</li> </ul>	N/A	N/A
<ul style="list-style-type: none"> <li>In February 2020, EMD staff updated the slide deck on environmental issues and pollution prevention at JBM-HH that is presented as part of the Newcomer Brief. Due to the COVID-19 pandemic, EMD has been unable to provide these briefings but is evaluating options to disseminate the information.</li> </ul>	N/A	N/A	
<p>Part I.E.2.f(5): The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.</p>	JBM-HH did not collaborate with other MS4 permittees on public involvement activities during this reporting year. Information and strategies for public involvement opportunities were shared with other DoD installations during DoD CBAT meetings.		
<p>MCM Effectiveness and Necessary Changes</p>	JBM-HH reached a large portion of the Installation's public through EQCC meetings, newcomer briefings, JBM-HH's Stormwater Pollution Prevention Webpage, and more. Unfortunately, due to the COVID-19 pandemic, certain planned public involvement activities were unable to be held during this permit year. EMD is currently in the process of planning public involvement activities for the next year (2021) as described in the MS4 Program Plan. Due to the COVID-19 public health crisis, certain public involvement activities may be more difficult to implement during the next permit year, as it was in the 2019-2020 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 this time. In order to continue spreading awareness and educating the public on pollution prevention, EMD plans, at a minimum, to increase the amount of distributed media materials, including newspaper articles in <i>The Pentagram</i> .		

**Attachment 1 - VSMP MS4 General Permit 2020 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary
<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, 2020;	The storm sewer system map and outfall information table were last updated in May 2019. Updates to the map included adding the recently-constructed stormwater management facilities. 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 November 2019, January 2020, March 2020, and June 2020. JBM-HH previously had 23 outfalls to inspect; however, due to recently property changes, one of the outfalls is now on Arlington National Cemetery (ANC) property. Additionally, due to 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.	No suspected illicit discharges to the MS4 were observed. One observation of flow during dry weather screening required further investigation. Dry weather flow was observed from an outfall located on the southern portion of the Installation, next to the Hatfield Gate, on November 8, 2019. This source of this flow was determined to be a leaking water line, which was repaired by DPW in December of 2019.
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.	<p>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.</p> <p>The EMD has created a Construction Inspection and Compliance Procedure, included as Appendix G 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.</p> <p>EMD has also been developing 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.</p>
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.	<p>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&amp;SC inspections for this project in accordance with Part I.E.4.a.(4) of the MS4 permit.</p> <p>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&amp;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.</p>
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 36 inspections of the Perimeter Security Fence Project Site, which included an initial inspection, biweekly inspections, and post-rain event inspections.
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 are 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.

**Attachment 1 - VSMP MS4 General Permit 2020 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary
<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; 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 18 aboveground SMFs on August 19, 26, 27, and 29, 2019 and four underground SMFs on September 25, 2019. The EMD is responsible for maintaining completed documentation received from USACE. EMD submitted a work order to DPW to correct deficiencies identified in one of the SMFs. Additionally, EMD and DPW are working to add certain SMFs to the grounds maintenance contractor's contract and bring in additional contractors for the regular maintenance of other SMFs (such as the vaults) and the rehabilitation of the existing Filterra units on base.
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 18 SMFs in August 2019 and four SMFs in September 2019. 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 deficiencies in SMFs were noted during the inspections, with the exception of the Filterra units located on base. EMD is working to identify the appropriate, qualified contractor to conduct the necessary maintenance for the units. Erosion was observed at the end of a grassed swale; EMD has submitted a work order to DPW to address this issue.
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 stormwater management facilities installed for this project will be reported to DEQ 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 reported BMPs to the DEQ Warehouse on 28 September 2020.
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 2020, EMD has worked 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 2021.
<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 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. The Good Housekeeping SOP was updated in 2019.
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 October 2019 to reflect the requirements of the 2018 MS4 permit and the termination of the Installation's Industrial General Permit. 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.

**Attachment 1 - VSMP MS4 General Permit 2020 Annual Report  
JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary
<p>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>	<p>During this reporting year, approximately 40 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 classroom training sessions were provided for these employees on February 4 and 5, 2020.</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>
<p>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.</p>	<p>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.</p>
<p>MCM Effectiveness and Necessary Changes</p>	<p>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 is working to identify/establish Environmental Coordinator positions for various buildings on base, in order to have one person with established responsibility for environmental compliance for each building.</p>