

**Joint Base Myer-Henderson Hall
VSMP MS4 General Permit
2022 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:** 2021-2022 (Period of Report: 1 July 2021 – 30 June 2022)

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: _____

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 2022 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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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. DPW is currently working towards purchasing a new street sweeper in order to continue and improve the program.
- Demolition of an approximately 1.25-acre area of asphalt tennis courts and conversion of the area to turf.
- Implementation of 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 project is in the contracting phase and contract award is expected sometime in September 2022.

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
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<p>Develop a PCB fact sheet</p>	<p>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, stormwater pollution prevention brochures have been updated to include PCB-related information and have been distributed on base.</p>
<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. In 2017 and 2018, two of the outfalls (013 and 021) were sampled twice and one outfall (012) was sampled once. There were no PCBs detected in any of the samples collected to date. Access issues resulted in a delay for the collection of a second sample at outfall 012. However, access was reobtained and the second sample was collected from the outfall on August 30, 2022. Lab results will be reported in the 2023 report.</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 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.	No changes or updates to personnel in the 2021-2022 permit year.								
Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts									
Part I.E.1.g(1): A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;	The High-Priority WQ Issues at JBM-HH are: <ul style="list-style-type: none"> • 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.								
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>High-Priority WQ Issue</th> <th>Activity</th> </tr> </thead> <tbody> <tr> <td>Oil & grease, hydrocarbons and related pollutants</td> <td> <ul style="list-style-type: none"> • Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable. • Distributed Stormwater Pollution Prevention brochures to and discussed pollutants and their effects on the Chesapeake Bay with the Radar Clinic staff. • Distributed general Stormwater Pollution Prevention brochures to staff across the installation during EMD's Multi-media Environmental Compliance Inspections. • Published an article in the <i>Pentagram</i>, JBM-HH's weekly newspaper, regarding 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> <ul style="list-style-type: none"> • Distributed Stormwater Pollution Prevention brochures geared towards stables staff to employees of the Caisson Stable. 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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. 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.								
Minimum Control Measure 2: Public Involvement/Participation									
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;	https://home.army.mil/jbmhh/index.php/teamJBMHH/about/Base/stormwater-pollution-prevention-jbm-hh-1								

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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>	<p>The following public involvement/participation activities were held during this reporting year:</p>		
	<p>Activity</p> <ul style="list-style-type: none"> Presented stormwater pollution prevention topics at the Environmental Quality Control Committee (EQCC) Meetings held on 3 August 2021 and 12 April 2022 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. 	<p>Metrics</p> <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 meetings.</p>	<p>Water Quality Benefits</p> <p>Indirect benefits through awareness of stormwater pollution issues.</p>
	<ul style="list-style-type: none"> Representatives of JBM-HH attended the Department of Defense (DoD) Chesapeake Bay Action Team (CBAT) Meetings on 29 July 2021, 28 October 2021, 27 January 2022, and 12 May 2022. 	<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"> JBM-HH representatives participated in two VADEQ/DoD/EPA Partnership Meetings held on 2 September 2021 and 24 February 2022. 	<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"> JBM-HH held two base-wide clean-up events during this reporting year. The Fall Clean-up Event was held from October 5 through 8, 2021 and the Spring Clean-up Event was held from April 25 through 29, 2022. 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"> Conduct clean-up within each organization, to include the outside area within 50 feet of buildings, barracks, and commercial spaces. Identify and turn-in excess property and unserviceable equipment. Utilize recycling locations as appropriate. Properly dispose of hazardous waste at designated collection points. Final inspection of the installation by senior leadership. 	<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"> JBM-HH collaborated with Arlington National Cemetery (ANC) on a clean-up event on June 8, 2022 for DoD's 2022 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. As a result of the cleanup in these areas, enough trash to fill approximately twelve large bags and several larger pieces of scrap metal were removed and prevented from further impacting the environment. 	<ul style="list-style-type: none"> Six JBM-HH participants 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. 	<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"> JBM-HH held a paper shredding event on 20 May 2022. 	<p>Quantifiable data was unavailable for this event.</p>	<p>Waste paper is collected for proper recycling and prevented from becoming a potential stormwater pollution source or adding to landfills.</p>
<p>Part I.E.2.f(5): The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.</p>	<p>Six participants from JBM-HH collaborated with several participants from ANC during the DoD's 2022 Clean the Bay Day event on June 8, 2022. 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. As a result of the cleanup in these areas, enough trash to fill approximately twelve large bags and several larger pieces of scrap metal were removed and prevented from further impacting the environment.</p> <p>Additionally, information and strategies for public involvement opportunities were shared with other DoD installations during DoD CBAT meetings.</p>		

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JBM-HH Minimum Control Measure Progress Evaluation**

Permit Section: Requirement	Implementation/Progress Summary
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 (2023) 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, 2022;	The storm sewer system map was most recently updated in March 2022 and the outfall information table was last updated in November 2020. 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-two outfalls were screened during this reporting period, with inspections occurring in March and June 2022. 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.
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 9 March 2022, a member of the Arlington National Cemetery (ANC) reported to EMD that Power Steering Fluid had leaked from The Old Guard (TOG) 44 PAX bus along McNair Road and Arlington National Cemetery. Approximately 2.5 gallons of fluid was released, based on the 3.5-gallon capacity of the bus. The majority of the fluid was released to paved roadways, with an unknown amount entering nearby storm drains. The bus was shut down and the Fire Department was notified by ANC to begin cleanup actions on ANC property with support from TOG Soldiers. JBM-HH DPW, EMD, and Operations and Maintenance staff placed booms at all impacted and nearby stormwater inlets on JBM-HH property. The staff also used absorbents to clean the oil on the roadways. EMD submitted a written report of the discharge event to Ms. Anna Tuthill, VADEQ on 10 March 2022, at which time the investigation was considered closed. Efforts to prevent a similar discharge in the future include presenting details about the discharge event during EQCC meetings to raise awareness and ensure proper response protocols are followed in the event of a similar release. Additionally, EMD is working with TOG to ensure properly stocked spill kits are stored on all buses and that staff are aware of spill response procedures.
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.
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;	No DEQ-permitted projects occurred at JBM-HH during this reporting year.

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Permit Section: Requirement	Implementation/Progress Summary
Part I.E.4.d(3): The total number and type of enforcement actions implemented and the type of enforcement actions.	No DEQ-permitted projects occurred at JBM-HH during this reporting year.
MCM Effectiveness and Necessary Changes	No DEQ-permitted projects occurred at JBM-HH during this reporting year.
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 9 September 2021 and four underground SMFs on 19 August 2021. The EMD is responsible for maintaining completed documentation received from USACE. 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 contractor has been identified, funding has been allocated, and a contract is expected to be in place by late 2022/early 2023.
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 August and September 2021. 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. 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 early 2023.
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 occurred at JBM-HH during this reporting year.
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 2022.
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 2023, with a contract expected to be in place by late 2022/early 2023.
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 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. No new standard operating procedures were developed during this reporting year. In addition to the routine SWPPP inspections conducted at the high-priority facilities on base, EMD conducts multi-media compliance inspections of facilities across the installation. These inspections 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.

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Permit Section: Requirement	Implementation/Progress Summary
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;	A SWPPP has been developed for the Caisson Stables.
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. The Caisson Stables was determined to be a high-priority facility during this reporting year and, as mentioned above, a SWPPP has been developed 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 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, two training sessions were provided via Microsoft Teams for these employees on April 19 and 20, 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"> • 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.