

Municipal Separate Storm Sewer System
(MS4) Program Plan

For

Virginia General Permit for Small
Municipal Separate Storm Sewer System
VPDES Permit #VAR040007

Revised 17 June 2021

1. PLAN PURPOSE AND REVISIONS

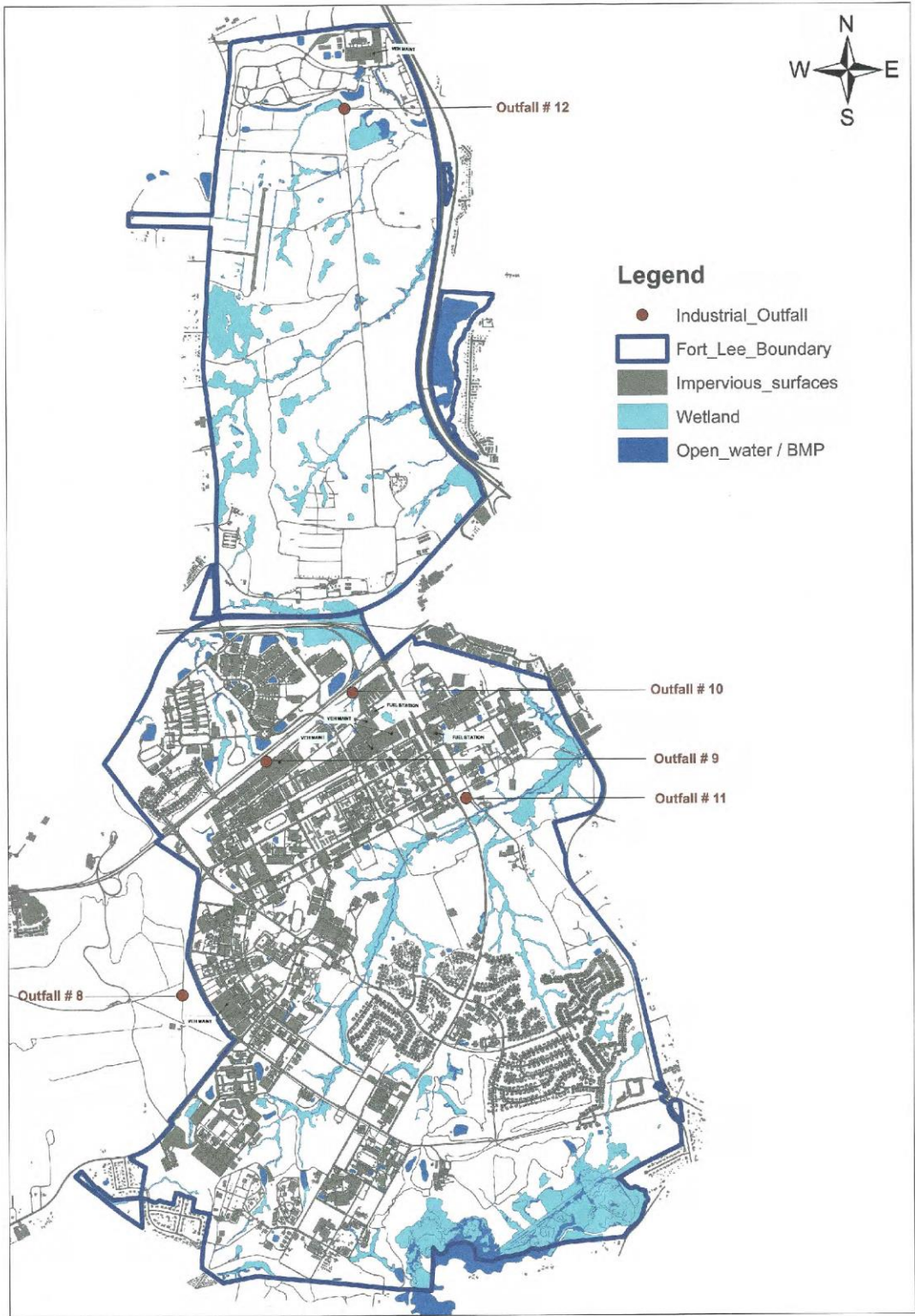
USAG Fort Lee has been authorized to discharge stormwater from its municipal separate storm sewer system (MS4) by the Virginia Department of Environmental Quality under the Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. The permit requires that the permittee develop, implement, and enforce a MS4 program designed to reduce the discharge of pollutants from the small MS4 to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations (VPDES MS4 Permit#VAR040007, Part I.B.).

This plan details the framework for a comprehensive program to minimize stormwater pollution by identifying the Best Management Practices (BMPs), measurable goals, and responsible parties for achieving compliance in accordance with 9VAC25-890-40, Section IC of the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (9VAC25-890-40 General Permit). Unless specifically noted, the minimum control measures described within this stormwater program plan will be implemented on a regional scale at the properties owned and operated by the U.S. Army Garrison Fort Lee.

Revisions to this Program Plan are expected throughout the life of the permit as part of the iterative process to reduce pollutant loading and protect water quality to the maximum extent practicable (VPDES Permit #VAR040007, Part I.C.4.). As such, revisions made in accordance with the VPDES MS4 Permit as a result of the iterative process do not require modification of the permit. Fort Lee will annually evaluate the MS4 Program Plan for program compliance, the appropriateness of identified BMP's and the progress towards achieving the identified measureable goals. Analysis of the information gathered for inclusion in the annual report will determine if BMP's remain effective or need to be modified. Revisions to this Program Plan are required to be summarized as part of the annual report, which is due annually on October 1st.

2. FACILITY BACKGROUND AND MS4 REGULATED SERVICE AREA

Fort Lee is located in America's Historic Heartland in Virginia, 25 miles south of Richmond and very near the confluence of the James and Appomattox rivers. Fort Lee consists of approximately 5,907 acres and is divided into two separated land areas known as main post and Fort Lee North Range.



Legend

- Industrial_Outfall
- Fort_Lee_Boundary
- Impervious_surfaces
- Wetland
- Open_water / BMP



PROGRAM ADMINISTRATION

Organizational Structure (Permit #VAR040007, Part I.C.1.a.)

The primary responsibility for coordinating, educating and reporting compliance with the MS4 General Permit is held by the MS4 Stormwater Program Administrator within the Directorate of Public Works, Environmental Division.

Many activities that are identified in the procedural best management practices (BMPs) that are provided below are implemented by other government employees located within other Directorates and Support Offices and within other Divisions of the Directorate of Public Works

MINIMUM CONTROL MEASURES

The six minimum control measures (MCMs) described in 9VAC25-890-40 Part I.C are:

- Public education and outreach
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management in new development and development on prior developed lands
- Pollution prevention and good housekeeping for facilities owned or operated by the permittee within the MS4 service area

For the MCMs discussed in Sections 9.1 – 9.6, the following information is provided for each MCM as required (VPDES Permit #VAR040007, Part I.C.1.c):

“For each MCM in Part I E, the following information shall be included:

- (1) Each specific requirement as listed in Part I E for each MCM;*
- (2) A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions in Part I E;*
- (3) All standard operating procedures or policies necessary to implement the BMPs;*
- (4) The measurable goal by which each BMP or strategy will be evaluated; and*
- (5) The persons, positions, or departments responsible for implementing each BMP or strategy;”*

Each BMP described will identify the primary responsible party or parties implementing the practice and/or providing information for reporting purposes. Fort Lee does not rely on an outside entity to implement any of the program minimum control measures.

Fort Lee – Operations and Maintenance utilizes a Mission & Installation Contracting Command (MICC) Services Contract with Skookum, Inc. which provides Garrison wide infrastructure maintenance and repair services. The contractor, Skookum, supports the MS4 program through their Roads, Streets, and Grounds Division as well as their Environmental Compliance Division. Skookum is responsible for maintenance, inspection, and repairs to the storm sewer system to ensure continuous normal operation and prevent flooding. Skookum also performs regular preventative maintenance of stormwater management facilities as well as annual inspections and major repairs as needed. All roads and parking areas across the Garrison and also maintained by Skookum and swept monthly with a sweeper and vacuum truck.

Minimum Control Measure #1: Public Education and Outreach on Stormwater Impacts

Part I.E.1.f (1)

A list of the high priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program

1. Identification and elimination of illicit non-stormwater discharges throughout the installation
2. Reduction of releases of Petroleum, Oil and Lubricants (POL) and hazardous material to the environment
3. Elimination of discharges to the storm sewer system from car wash operations
4. Elimination of discharges to storm sewer system of fats, oil, and grease (FOG) from dining facilities

Part I.E.1.f (2)

The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges.

1. This is the primary thrust of the MS4 program
2. Fort Lee is the Army's center for petroleum training, and maintains large volumes of POL in training environments; also a major focus of the MI/EMS program
3. GSA vehicles are washed on site by mobile car wash operators, and employees often employ these operators to wash their personal vehicles while on duty)
4. There are many dining facilities as many soldiers go through training at Fort Lee. All dining facilities have grease traps/tanks.

Part I.E.1.f (3)

Identification of the public audience to receive each high-priority stormwater message.

1. **Housing Residents:** There are approximately 1,508 housing units located at Fort Lee with a total residential population of approximately 8,400.
2. **Outreach Strategies:** Traditional Written Materials (Fact Sheets, Brochures) and Media Materials (electronic media to include mass emails and Facebook; newspaper articles)
3. **Contractor Personnel:** A significant amount of activity occurring on Fort Lee is carried out by contractors for the types of services such as custodial, operations and maintenance, residential housing, and repair and construction. Approximately 2,500 contractors work on Fort Lee.
Outreach Strategies: Traditional Written Materials (Fact Sheets, Brochures) and Training Materials
4. **Military Personnel:** Fort Lee has a military component of approximately 10,300 personnel that are active duty or reserves. It should be noted that some of this audience overlaps with the housing resident audience.
Outreach Strategies: Media Materials (electronic media to include mass emails and Facebook; newspaper articles)
5. **Civilian Personnel:** Approximately 5,500 civilian personnel are employed at Fort Lee.
Outreach Strategies: Traditional Written Materials (Fact Sheets, Brochures) and Media Materials (electronic media to include mass emails and Facebook; newspaper articles)

Part I.E.1.f (4) and Part I.E.1.f (5)

The strategies from Table 1 of Part I.E.1.d to be used to communicate each high-priority stormwater message.

Planned education and outreach activities associated with proposed schedule are listed below.

| Anticipated Date | High Priority Stormwater Issue | Audience | Strategy |
|-------------------------|---------------------------------------|--|---|
| September | Illicit Discharge; POL | Housing residents, military and civilian personnel | Media Materials: Newspaper Article in <i>The Traveller</i> ; Fort Lee Facebook page |
| January | Illicit Discharge | Housing residents, military and civilian personnel | Media Materials: Newspaper Article in <i>The Traveller</i> ; Fort Lee Facebook page |
| April | Illicit Discharge; POL; Car Wash | Housing residents, military and civilian personnel | Media Materials: Newspaper Article in <i>The Traveller</i> ; Fort Lee Facebook page |
| April | Illicit Discharge; POL; Car Wash | Housing residents, military and civilian personnel | Traditional Written Materials: Earth Day Display; Earth Day Informative Flyer |
| May | Car Wash | Housing residents, military and civilian personnel | Media Materials: Fort Lee Facebook page |

BMP 1.1 Implement a Public Education and Outreach Program

Measurable Goals: In permit year 1, review and revise the Public Education and Outreach Program to reflect the conditions set forth in the new MS4 permit (VPDES Permit #VAR040007, Part I.E.1.). In permit years 1 - 5, in accordance with the Public Education and Outreach Program, annually utilize two or more of the public education and outreach strategies listed in Part I.E.1.d. Table 1 to communicate to the public the high priority stormwater issues to targeted audiences. In permit years 2 – 5 annually review the Public Education and Outreach Program and revise, as needed.

Annual Reporting and Record Keeping: In the annual report, include a list of the education and outreach activities conducted during the reporting period for each high priority water quality

issue, the estimated number of people reached and a list of strategies used to communicate each high-priority stormwater issue. Also provide a summary of any revisions that were made to the Public Education and Outreach Program.

Responsible Party: DPW EMD

Minimum Control Measure #2: Public Involvement/Participation

Part I.E.2.e (1)

The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;

U.S Army Garrison Fort Lee Environmental Management Division page:

<https://home.army.mil/lee/index.php/about/Garrison/directorate-public-works/environmental-management>

Currently the public can find information on how to report spills and find the spill report form on the Fort Lee Environmental Management Division page under “NOTICE” and “Spill Response Poster and Report Form”:

https://home.army.mil/lee/application/files/9215/9966/1951/Spill_Response_Poster_and_Form_2020.pdf

Stormwater illicit discharge/pollution reporting contact information can be found on the Fort Lee Environmental Management Division page under “Environmental and Related Services”:

https://home.army.mil/lee/application/files/2015/9966/1949/Fort_Lee_Environmental_and_Related_Services.pdf

Response to Public Input: The MS4 Stormwater Program Manager monitors email and telephone messages daily, Monday – Friday. In the event that the MS4 Stormwater Program Administrator is out of the office, a voice message and email message is activated to notify people on who they may contact for immediate response. If a complaint is received that warrants an immediate investigation because it has the potential to be an illicit discharge, the complaint is investigated in accordance with the procedures outlined in the Fort Lee Red Plan.

Part I.E.2.e (2)

The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program;

<https://home.army.mil/lee/index.php/about/Garrison/directorate-public-works/environmental-management/documents-review>

Part I.E.2.e (3)

A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash

collected from a stream cleanup, the number of participants in a hazardous waste collection event, etc.

| Anticipated Date | Category | Type of Activity | Metric |
|------------------|-----------------|---------------------------------------|--|
| September | Restoration | Fall Cleanup for Military Personnel | Number of Soldiers; Numbers of bags of trash collected |
| March/April | Restoration | Spring Cleanup for Military Personnel | Number of Soldiers; Numbers of bags of trash collected |
| April | Education Event | Booth at Earth Day | Number of Attendees |
| May/June | Education Event | Booth at Safety Day | Number of Attendees |

BMP 2.1 Maintain a webpage dedicated to the MS4 Program and Stormwater Pollution Prevention

Measureable Goal: Maintain the webpage with the following information as required by Part I.E.2.b.: Effective MS4 Permit and coverage letter, most current MS4 Program Plan, annual reports for each year of the term covered by the current permit. Update the MS4 Program Plan at a minimum once per reporting period by 30 June. Post copies of the MS4 Program Plan on the Fort Lee webpage at a minimum of once per reporting period and within 30 days of submittal of the annual report to the Virginia Department of Environmental Quality (VADEQ). Provide contact information where the public can submit comments on Stormwater Program documents to include MS4 Program Plan and report illicit discharges, improper disposal or spills to the MS4, complaints regarding land disturbing activities or other potential stormwater concerns. Post copies of each annual report on the Fort Lee webpage within 30 days of submittal to the VADEQ and retain copies of annual reports online for the duration of the MS4 permit. During permit years 2-5 in order to improve reporting communication, Fort Lee will work to create and implement a complaint form on the webpage that allows for direct submittal of a complaint to the MS4 Stormwater Program Administrator and provide responses to comments and concerns directly on the webpage for increase viewership and transparency.

Annual Reporting and Record Keeping: In the annual report, provide a summary of any public input on the MS4 program received (including stormwater complaints) during the reporting period and how the permittee responded and provide the webpage address to the MS4 program and stormwater website.

Responsible Party: DPW EMD will coordinate with the Public Affairs Office (PAO) and the Network Enterprise Center (NEC) to make revisions to the website. DPW EMD will maintain records on public input received.

BMP 2.2 Public Involvement Activities

Measureable Goal: In permit years 1 -5, implement no less than four activities per year from two or more of the categories listed in Permit Part I.E.2.c., Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

Involve tenant agencies, schools, community partners and other members of the public with the goal of increasing public participation to reduce stormwater pollutant loads, improve water quality and support local restoration and clean-up projects, programs, groups, meetings or other opportunities for public involvement.

Annual Reporting and Record Keeping: In the annual report, provide a description of the public involvement activities that were implemented during the reporting period and a provide a report of the metric as defined by each activity and an evaluation as to whether or not the activity is beneficial to improving water quality.

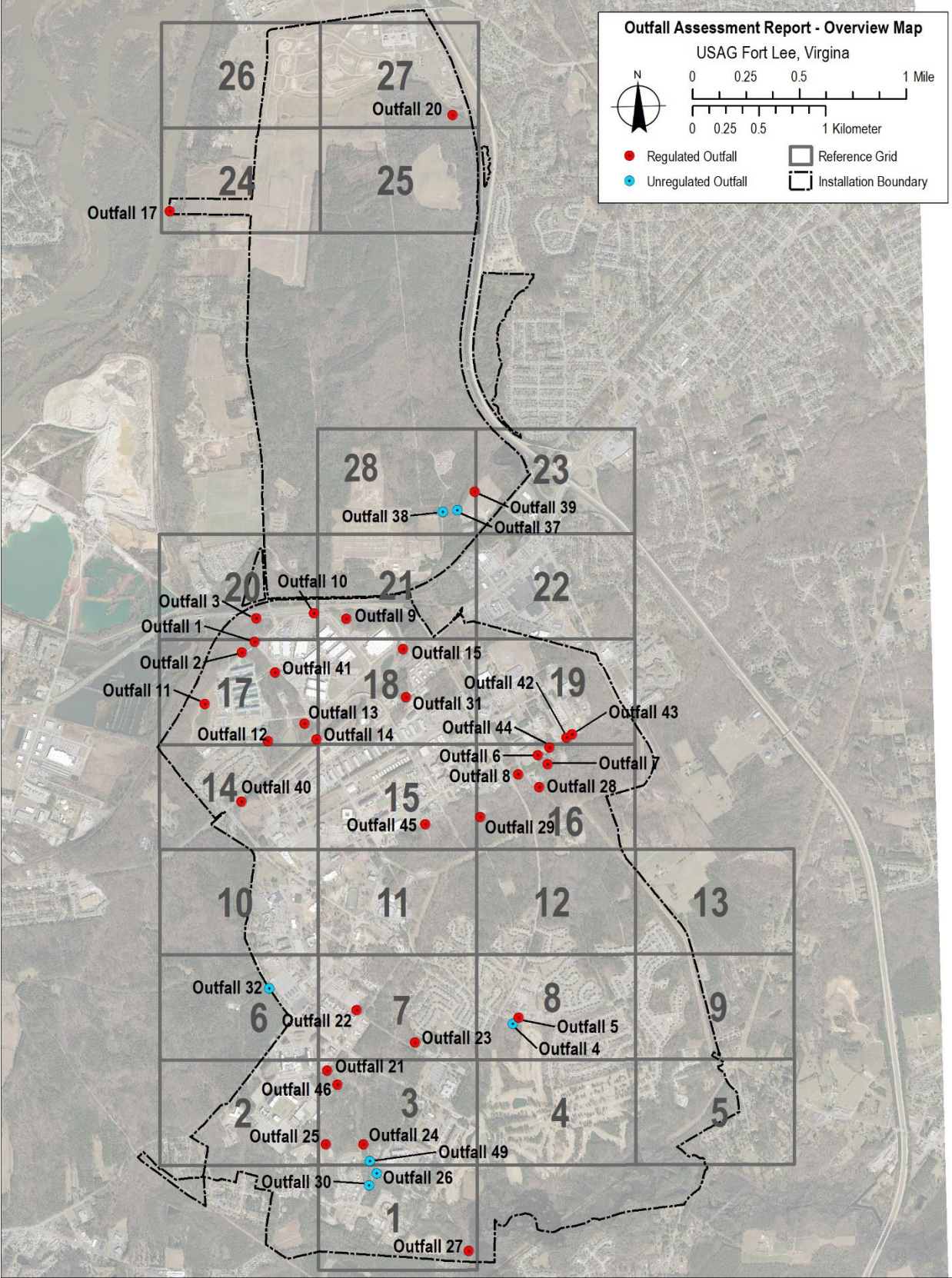
Responsible Party: DPW EMD

Minimum Control Measure #3: Illicit Discharge Detection and Elimination

Part I.E.3.d (1)

The MS4 map and information table required by Part I E 3 a. The map and information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;

Fort Lee maintains mapping data for all MS4 outfalls and stormwater management facilities. This mapping data assists Fort Lee in determining the spatial location of stormwater system components and enhances Fort Belvoir's ability to locate the receiving waters of a particular stormwater system in the event that a spill or an illicit discharge is identified. The MS4 map includes MS4 outfalls discharging to surface waters, a unique identifier for each mapped item, name and location of receiving waters to which the MS4 outfall or point of discharge discharges, MS4 regulated service area and stormwater management facilities owned by Fort Lee. Outfalls receiving discharge from the privatized housing group are not included within Fort Lee's outfalls and stormwater management facilities. These are maintained separately by the privatized housing group.



Part I.E.3.d (2)

Copies of written notifications of new physical interconnections given by the permittee to other MS4s

Part I.E.3.d (3)

The IDDE procedures described in Part I E 3 c.

BMP 3.2 Develop and Maintain an Accurate MS4 Map and Information Table

Measurable Goal: No later than October 1 of each year, update the storm sewer system map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate reporting period. (Permit#VAR040007, Part I.E.3.a.(4)).

Annual Reporting and Record Keeping: In the annual report, a confirmation statement will be provided that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting period (Permit#VAR040007, Part I.E.3.e.(1)).

Responsible Party: DPW EMD

BMP 3.2 Prohibit Unauthorized Non-stormwater Discharges into the MS4

Fort Lee Environmental Policy is the existing policy that prohibits unauthorized non-stormwater discharges into the MS4 (Permit #VAR040007, Part I.E.3.b.)

Measurable Goal: Review, revise, as needed, and obtain Garrison Commander signature on Fort Lee Environmental Policy when a new Garrison Commander takes command.

Annual Reporting and Record Keeping: In the annual report, provide narrative on whether new policy memorandum was signed due to change in Garrison Commander.

Responsible Party: DPW EMD

Minimum Control Measure #4: Construction Site Stormwater Runoff Control

Part I.E.4.c (1), Part I.E.4.c (2), and Part I.E.4.c (3)

(1) If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program;

(2) If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (3):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department;

(3) A description of the legal authorities utilized to ensure compliance with Part I E 4 a to control construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

Fort Lee is not required to operate an approved Virginia Erosion and Sediment Control

Program (VESCP) and in accordance with Department of Army guidance has not developed standards and specifications for Virginia Department of Environmental Quality review and approval. Therefore, Virginia Department of Environmental Quality is the VESCP authority for Fort Lee. Under VADEQ VESCP Authority, Fort Lee is required to submit to VADEQ for review and approval an Erosion and Sediment Control Plan for land disturbing projects that are equal to and greater than 10,000 square feet.

Routine maintenance projects are exempt from obtaining a CGP if the project meets the exemption guidelines published in the Virginia Stormwater Management Act §62.1-44.15:34, i.e. “routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project.”

The applicable guidance document, Fort Lee Environmental Special Conditions, is made available to all designers, project proponents, contract specialist, and construction contractors during the project review process and are also posted on the Fort Lee Environmental Management Division website @ <https://home.army.mil/lee/index.php/about/Garrison/directorate-public-works/environmental-management>

Part I.E.4.c (4)

Written inspection procedures to ensure the erosion and sediment controls are properly implemented and all associated documents utilized during inspection including the inspection schedule;

Inspections performed by the E&S Inspector of the project is submitted to DPW EMD to ensure the erosion and sediment controls are properly implemented. DPW EMD Stormwater technician accompanies E&S inspector of the project during inspections as well. Fort Lee EMD does their own independent site inspections (surveillance) to satisfy MS4 requirements. If any violations are observed or reported, the DPW representative to address issues with project managers through the chain of command.

Part I.E.4.c (5)

Written procedures for requiring compliance through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms;

Fort Lee’s sole course of action when deficiencies are found is to notify the Project Manager or Contracting Officer and request that they communicate the issue to the contractor and ask that he/she take corrective action. To their credit, and in order to help Fort Lee remain in compliance, Project Managers and Contracting Officers have not hesitated to compel their contractors to make any corrective action DPW-EMD has requested. During the reporting period, deficiencies requiring corrective action were noted during DPW-EMDs inspections of the regulated construction projects on the installation.

Part I.E.4.c (6)

The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the construction site stormwater runoff control requirements in Part I E 4.

DPW EMD is responsible for reviewing and participating in inspections to ensure construction site stormwater runoff control requirements are met. DPW O&M are responsible for ensuring COR corrects contractor deficiencies.

BMP 4.1 Communicate the Requirements of the MS4 Program

Measurable Goal: Annually review and update MS4 documents for distribution, conduct pre-construction training, as needed.

Reporting and Record Keeping: In the annual report, provide a summary of any reviews and updates of documents that were completed and the number of pre-construction meetings conducted. All preconstruction project reviews are always sent out through the NEPA Manager for all concerned activities to review within 7-days. Records of the review decisions are all kept in NEPA Manager or other Stormwater Files for projects that are not logged into NEPA. NEPA Manager attends all pre-construction meetings.

Responsible Party: DPW EMD

BMP 4.2 Erosion and Sediment Control (ESC) Site Inspections

Measurable Goal: Perform site inspections and collect inspection reports of 100% of active construction sites that involve land disturbance of 10,000 square feet or greater.

Annual Reporting and Record Keeping: In the annual report, provide a summary of the total number of ESC inspections conducted in the MS4 regulated service area for construction sites that involve land disturbance of 10,000 square feet or greater (VPDES Permit #VAR040007, Part I.E.4.d.(2)).

Responsible Party: DPW EMD

BMP 4.3 Progressive Compliance and Enforcement Strategy

Measurable Goal: Implement the compliance and enforcement strategy when construction contractors have repeated non-compliance findings on bi-weekly or other scheduled erosion and sediment control inspections on an active construction site.

Annual Reporting and Record Keeping: In the annual report, provide a summary of enforcement actions taken to include the total number and type of enforcement actions taken (VPDES Permit #VAR040007, Part I.E.4.d.(3))

Responsible Party: DPW EMD, Contracting Officer Representatives, VADEQ (as needed for Compliance Assistance)

Minimum Control Measure #5: Post-Construction Runoff Control

Part I.E.5.h (1)

If the permittee implements a VSMP in accordance with Part I E 5 a (1) and (2):

- (a) A copy of the VSMP approval letter issued by the department;
- (b) Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and
- (c) Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned BMPs.

Fort Lee is not required to operate an approved Virginia Stormwater Management Program (VSMP) and in accordance with Department of Army guidance has not developed standards and specifications for Virginia Department of Environmental Quality review and approval. Therefore, Virginia Department of Environmental Quality (VADEQ) is the VSMP authority for Fort Lee. Under VADEQ VSMP Authority, Fort Lee is required to submit to VADEQ for review and approval Stormwater Management Plans for land disturbing projects that are equal to and greater than one acre.

Part I.E.5.h (2)

If the permittee implements a post-development stormwater runoff control program in accordance with Part I E 5 a (3):

- (a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and
- (b) A copy of the most recent standards and specifications approval letter from the department.

Land disturbing projects that involve the construction of a federal facility with a footprint that exceeds 5,000 square feet are required to develop a stormwater management plan which demonstrates that the development or redevelopment project maintains or restores the predevelopment hydrology of the property with regard to temperature, rate, volume, and duration of flow to the maximum extent technically feasible.

Construction/maintenance/utility projects resulting in land disturbance equal to or greater than one acre are required to develop a Stormwater Management Plan for submittal to VADEQ. The DPW ED Stormwater Plan Reviewer completes a plan review utilizing the designer-completed most current version of the VADEQ Plan Submitter's Checklist for Stormwater Management and provides comments to the designer prior to submittal of the plan to VADEQ for review and approval.

<http://www.epw.senate.gov/water.pdf>

<http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/HndbkVolumeI.pdf>

<http://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/SWMHandbookVolume%20II.pdf>

Part I.E.5.h (3)

A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;

Part I.E.5.h (4)

Written inspection procedures and all associated documents utilized during inspection of stormwater management facilities owned or operated by the permittee;

Inspection procedures follow VDOT specifications. These inspection procedures provided to the Operations and Maintenance Division of Fort Lee. Stormwater Management Facilities are maintained and inspected annually. Maintenance logs are saved in the Environmental Management Division shared drive.

Share Drive Link:

S:\DPWL\Private\FY_2021_Active_Year\DPW_DIV EMD\Stormwater\SW-MS4\SW-MS4-BMP Maintenance Reports

Part I.E.5.h (5)

The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program;

All Fort Lee stormwater management facilities that are covered under the DPW O&M contract are maintained by the O&M contractor.

Part I.E.5.h (6)

The stormwater management facility spreadsheet or database incorporated by reference and the location or webpage address where the spreadsheet or database can be reviewed.

For post-construction management of stormwater management facilities, Fort Lee maintains an EXCEL spreadsheet of all known stormwater management facilities that discharge into the MS4. Stormwater management facilities on Fort Lee are annually inspected (VPDES Permit #VAR040007, Part I.E.5.b. (2)) by the Directorate of Public Works, Operations and Maintenance Division through an operations and maintenance contract that is valid for five years. The current contract has a period of performance from June 30, 2018 – June 30, 2023. The MS4 Program Plan will be revised during the first year of the permitting cycle once the inspection and maintenance plan is reviewed and revised.

BMP 5.1 Maintain an Electronic Database or Spreadsheet (VPDES Permit #VAR040007, Part I.E.5.d.)

Measurable Goals: Maintain an EXCEL spreadsheet of all known stormwater management facilities that discharge into the MS4 at the DPW Environmental Management Division office. This spreadsheet is incorporated by reference. The database includes all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction and includes information regarding the type of facility/BMP, the latitude and longitude, the total number of acres treated by the facility/BMP to include a breakdown of pervious and impervious acres, the date the facility was brought online, the sixth order hydrologic unit (HUC) code and the name of any impaired water segments within each HUC listed, whether the stormwater management facility or BMP is owned or operated by Fort Lee or another entity such as privatized housing or a tenant command, whether or not the stormwater management facility or BMP is part of the Chesapeake

Bay TMDL Action Plan or Local TMDL Action Plan or both, whether a maintenance agreement exists for privately owned stormwater management facilities or BMPs and date of most recent inspection (VPDES Permit #VAR040007, Part I.E.5.d.(1) – (9)). The electronic database or spreadsheet will be updated no later than 30 days after a new stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction or discovered if it is an existing stormwater management facility (VPDES Permit #VAR040007, Part I.E.5.e.).

Annual Reporting and Record Keeping: Use the VADEQ Construction Stormwater Database or other application as specified by VADEQ to report each stormwater management facility installed after July 1, 2014 to address the control of postconstruction runoff from land disturbing activities that are required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities (CGP) (VPDES Permit #VAR040007, Part I.E.5.f.). No later than October 1 of each year, electronically report the stormwater management facilities and BMPs implemented between July 1 and June 30 of each year using the DEQ BMP Warehouse and associated template for any stormwater management facilities and BMPs that were installed to control postdevelopment stormwater runoff from land disturbing activities less than one acre and for which a CGP was not required (VPDES Permit #VAR040007, Part I.E.5.g.). Provide confirmation statements that stormwater management facilities (BMPs) were electronically reported (VPDES Permit #VAR040095, Part I.E.5.i.(4)-(5))

Responsible Party: DPW EMD

BMP 5.2 Conduct Annual Inspections and Maintenance of Storm Water Management Facilities

Measurable Goals: In permit year 1, maintain written inspection and maintenance procedures by reviewing and revising, as necessary, the *General Plan for Stormwater Management Facility Inspection and Maintenance* (VPDES Permit #VAR040007, Part I.E.5.b.(1)). Permit years 1 – 5, conduct inspections and maintenance in accordance with the general plan.

Annual Reporting and Record Keeping: In the annual report, provide the number of enforcement actions initiate to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action (VPDES Permit #VAR040007, Part I.E.5.i.(b)) during the reporting period; provide a narrative of total number of inspections conducted with a breakdown of number of privately owned stormwater management facility inspections (RCI owned and operated facilities) and DPW stormwater management facilities (VPDES Permit #VAR040007, Part I.E.5.i.(1)(a) and (2)) during the reporting period; and, provide a description of the significant maintenance, repair or retrofit activities performed on all stormwater management facilities (does not include routing activities such as grass mowing or trash collection)(VPDES Permit #VAR040007, Part I.E.5.i.(b)(3)) during the reporting period.

Responsible Party: DPW EMD, DPW O&M Division,

Minimum Control Measure #6: Pollution Prevention/Good Housekeeping for Municipal Operations

Part I.E.6.p (1)

The written procedures for the operations and maintenance activities as required by Part I E 6 a;

Written procedures for operations and maintenance activities are included in our Operations and Maintenance Base Ops contract, Performance Work Statement, and in the Contractor’s Environmental Protection Plan. Some written procedures are also included in Fort Lee’s Environmental Special Conditions. Information regarding road, street, and parking lot maintenance and equipment maintenance can be found in the Operations and Maintenance Base Ops Contract. For High Priority Facilities, the written procedures regarding road, street, and parking lot maintenance and equipment maintenance can be found in the Stormwater Pollution Prevention Plan. Written Procedures regarding application, storage, transport, and disposal of pesticides, herbicides, and fertilizers can be found within the Fort Lee Environmental Special Conditions.

The Operations and Maintenance (O&M) activities for the Installation are contracted through the Mission and Installation Contracting Command (MICC). The MICC issued contract W91QF5-18-C-0004 that specifies all requirements and standards, work management, and personnel qualifications and certification requirements. Skookum contract information can be found in the Performance Work Statement. The Base Operations contractor also has an Environmental Protection Plan which discusses applicable environmental regulation and permits with work and required training to stay in compliance.

Written procedures in the documents discussed above are too large for this document and can be found in the shared drive:

S:\DPWL\Private\FY_2021_Active_Year\DPW_DIV EMD\Stormwater\SW-MS4\Skookum Contract Information

Part I.E.6.p (2)

A list of all high-priority facilities owned or operated by the permittee required in accordance with Part I E 6 c, and whether or not the facility has a high potential to discharge;

| Building | Tenant | Purpose | Observation | HPF Risk |
|-----------------|---------------|-----------------------|---|-----------------|
| 1630 | AAFES | GAS STATION | Tire storage in back; all underground tanks; Spills occur from users | MED |
| 4200 | QM | LABORATORY INSTR BLDG | Lab, cooking, dehydrator and digester; two used oil tank; Heavy spillage and grease stains; No storm drain close by | HIGH |
| 4309 | AAFES | FAST FOOD/SNACK BAR | Two grease traps on site; Extremely heavy oil stains | HIGH |

| | | | | |
|-------|-------|--------------------------------|--|------|
| 6210 | DPW | ENGINEERING/HOUSING MAINT SHOP | O&M Laydown yard; Mulch pile shows signs of washing out, needs a berm. Gas tank present | HIGH |
| 6210 | DPW | SALT AND SAND DOME | No outfall in vicinity; Signs of washout; Needs some sort of berm/barrier to prevent exposure; Hazwaste locker present; unsure if stream is nearby | HIGH |
| 6274 | TACOM | VEH MAINT SHOP | Motorpool; No drip pans present; Used oil tank is next to storm drain; Car wash present in parking lot. I believe there is an OWS on site | HIGH |
| 6275 | TACOM | VEH MAINT SHOP | Motorpool; No drip pans present; Used oil tank is next to storm drain; Car wash present in parking lot. I believe there is an OWS on site | HIGH |
| 6295 | LRC | FUELING FACILITY | All underground tanks | LOW |
| 6298 | TACOM | VEH MAINT SHOP | Motorpool; There is a used oil and anti-freeze tank outside of building. Drip pans are used underneath all vehicles; Fuel tank truck is in secondary containment | LOW |
| 7148 | 7TB | VEH MAINT SHOP | Motorpool; There is a used coolant and oil tank outside of building. Drip pans are used underneath all vehicles. Historically, has had many issues with facility | HIGH |
| 9025 | AAFES | EXCHANGE CAFETERIA | Pextra; There is secondary containment for spill from grease pouring; Spills frequently | MED |
| 11040 | QM | ACCESS CTRL FAC P (PTF) | PTF; Soldiers practice moving petroleum from one tank to another | LOW |

| | | | | |
|-------------|-------|----------------------|--|------|
| 12246 | QM | ACCESS CTRL FAC | MIF; Vehicles that require drip pans, paints, fuel storage tanks, and fuel "pods" are scattered on site. Fuel training has previously had spill reports | HIGH |
| 12402 | USAR | USAR MOTOR POOL | Motorpool; There are parked motor vehicles | HIGH |
| 17501 | TACOM | MAINT SHOP, GEN PURP | North Range Motorpool; Used oil and antifreeze tank located outside that is double-lined. Used material is discharged from inside using an automatic system to discharge into tank. Empty drums outside need to be labeled | LOW |
| 18028 | LRC | DINING FAC. | Dumpsters on site sometimes leaks, Tenants have previously dumped into storm drain at loading dock | HIGH |
| 11812/11814 | | RECREATIONAL SHELTER | Pesticide/herbicide storage and mixing area | HIGH |

An installation evaluation was performed in June of 2020 to reevaluate tenant facilities to determine risk of pollutants. Rows highlighted in blue were HPFs listed previously. All rows in white and recently added as scope of works at facilities have changed and permit conditions have updated.

Part I.E.6.p (3)

A list of lands for which turf and landscape nutrient management plans are required in accordance with Part I E 6 i and j, including the following information:

- (a) The total acreage on which nutrients are applied;
- (b) The date of the most recently approved nutrient management plan for the property; and
- (c) The location in which the individual turf and landscape nutrient management plan is located;

Fort Lee has a facility-wide Nutrient Management Plan that focuses primarily on operations at the Cardinal Golf Course, but also addresses nutrient application during construction and during municipal operations that has been in place since 26 June 2016. The Nutrient Management Plan encompasses 60 acres of treated land on Fort Lee.

Part I.E.6.p (4)

A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate;

Operations and Maintenance activities are performed by the DPW Operations and Maintenance Division through an operations and maintenance contract with Skookum. Construction on the installation is also performed by DPW Operations and Maintenance Division through contracts with various companies. All contractors on the installation are required to abide by the Fort Lee Environmental Policy and Environmental Special Conditions. Both the Fort Lee Environmental Policy and the Environmental Special Conditions requires all employees and service members to take the Environmental General Awareness Training (EGAT) which covers topics like: illicit discharge and spill response. The Environmental Special Conditions goes in depth with which Stormwater Management and Erosion and Sediment Controls are required for certain projects.

Hunt Housing, the privatized housing partner, conducts their own operations and maintenance of the housing units located on Fort Lee.

Part I.E.6.p (5)

The written training plan as required in Part I E 6 m.

Fort Lee has developed a training plan that consists of time frames of each identified party must be stormwater trained yearly, bi-annually, and once arriving at Fort Lee. Below is the training plan:

| |
|---|
| Field Personnel Illicit Discharge Training (MCM 6 Part m.1) (once every 24 months) |
| |
| O&M Training (MCM 6 Part m.2) (once every 24 months) |
| |
| Public Works Training (MCM 6 Part m.3) (once every 24 months) |
| |
| Recreational Facilities Training (MCM 6 Part m.3) (once every 24 months) |
| |
| Pesticides and Herbicide Applicators (MCM 6 Part m.4) |
| *Certifications by VA Department of Agriculture and Consumer Services can be used instead |
| Erosion and Sediment Program Administrators and Inspector (MCM 6 Part m.5) |
| *Certifications by VA Department of Environmental Quality must not be expired |
| Spill Response Training with Fire Fighters and Law Enforcement (MCM 6 Part m.7) |
| |

Training information including date, training event, objective, and number in attendance will be recorded in the MS4 Mastersheet. All training sign-in sheets will be located in the shared drive. All certifications required will also be continuously updated and located in the shared drive. All employees (contractors, civilians, and soldiers) are required to take the Environmental General Awareness Training which includes hot topics like illicit discharge and spill response.

BMP 6.1 Written Procedures for Operations and Maintenance Activities

Permit #VAR040007, Part I.E. The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:

- (1) Prevent illicit discharges;
- (2) Ensure the proper disposal of waste materials, including landscape wastes;
- (3) Prevent the discharge of wastewater or permittee vehicle wash water or both into the MS4 without authorization under a separate VPDES permit;
- (4) Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities;
- (5) Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices;
- (6) Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and
- (7) Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.

Measureable Goals: No later than June 30th of each year, annually review Environmental Special Conditions, Environmental Policy, and Skookum's Environmental Protection Plan and revise as needed. Operations and Maintenance Contract should be reviewed before renewal to ensure all new updates are included in the contract. Within 90 days of identification of a new activity/process that contributes to stormwater pollution, develop and distribute process-specific BMP Fact Sheet.

Annual Reporting and Record Keeping: In the annual report, provide a summary of any changes to the Environmental Special Conditions, Environmental Policy, and Skookum's Environmental Protection Plan.

Responsible Party: DPW EMD, DPW O&M Division

BMP 6.2 Develop and Implement Stormwater Pollution Prevention Plans (SWPPP)

Permit #VAR040007, Part I.E.5.b requires Fort Lee to identify which of the high-priority facilities have a high potential to discharging pollutants within 12 months of state permit coverage (by October 31, 2019).

For each facility identified, a site specific stormwater pollution prevention plan is required to be maintained and implemented. High-priority facilities (HPF) are defined as facilities that have a high potential for discharging pollutants and includes those facilities that are not covered under a separate VPDES permit and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff (Permit #VAR040093, Part I.E.5.b.):

- (1) Areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater;
- (2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;
- (3) Material handling equipment;

- (4) Materials or products that would be expected to be mobilized in stormwater runoff during loading/unloading or transporting activities (e.g., rock, salt, fill dirt);
- (5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- (6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;
- (7) Waste material except waste in covered, non-leaking containers (e.g., dumpsters);
- (8) Application or disposal of process wastewater (unless otherwise permitted); or
- (9) Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

Stormwater pollution prevention plans are required to include the following (Permit VAR040007, Part I.E.6.d.):

- (1) A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies;
- (2) A description and checklist of the potential pollutants and pollutant sources;
- (3) A description of all potential nonstormwater discharges;
- (4) Written procedures designed to reduce and prevent pollutant discharge;
- (5) A description of the applicable training;
- (6) Procedures to conduct an annual comprehensive site compliance evaluation;
- (7) An inspection frequency of no less than once per year and maintenance requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP; and
- (8) A log of each unauthorized discharge, release, or spill incident reported;

Measureable Goals:

For all HPFs identified, review existing SWPPPs to determine if all SWPPP requirements specified in Permit #VAR040007, Part I.E.6.d. are addressed. From November 1, 2019 – 31 October 2023, implement SWPPPs. No later than June 30 of each year, Fort Lee will annually review any high-priority facility for which a SWPPP has not been developed to determine if the facility has a high potential to discharge pollutants. If the facility is determined to be a high-priority facility with a high potential to discharge pollutants, a SWPPP will be developed no later than December 31 of that same year.

Annual Reporting and Record Keeping: In the annual report, provide a summary of any new SWPPPs developed during the reporting period and any SWPPPs modified or the rationale of any high priority facilities delisted during the reporting period.

Responsible Party: DPW EMD

BMP 6.3 Implement Nutrient Management Plans

Measureable Goals: Develop new Nutrient Management Plans for new facilities that have lands where nutrients are applied to a contiguous area greater than one acre, as needed for the term of the MS4 permit. Review and update existing Nutrient Management Plans every three years, as needed, for the term of the MS4 permit.

Annual Reporting and Record Keeping: In the annual report, provide a summary of any new turf and landscape nutrient management plans developed that includes the location and total acreage of each land area and the date of the approved nutrient management plan. In the annual report, provide a summary of the existing plans that were review and updated during the reporting period.

Responsible Party: DPW EMD

BMP 6.4 Revise and Implement Written Training Plan

The Fort Lee Stormwater Pollution Prevention Training Plan has been written to ensure the following

(Permit #VAR040093, Part I.E.6.m.):

- (1) Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months;
- (2) Employees performing road, street and parking lot maintenance receive training in pollution prevention and good housekeeping associated with those activities no less than once per 24 months;
- (3) Employees working in and around maintenance, public works, or recreational facilities receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months;
- (4) Employees and contractors who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act. Certification by the Virginia Department of Agriculture and Consumer Services Pesticide and Herbicide Applicator program shall constitute compliance with this requirement;
- (5) Employees and contractors serving as plan reviewers, inspectors, program administrators and construction site operators obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;
- (6) Employees and contractors implementing the stormwater program obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations; and
- (7) Employees whose duties include emergency response have been trained in spill response. Training of emergency responders such as firefighters and law enforcement officers on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.

The Fort Lee Combined Industrial Stormwater (ISW) and Municipal Separate Storm Sewer System (MS4) Integrated Stormwater Pollution Prevention Training Plan January 2-19 is a large document and therefore, is incorporated into the MS4 program plan by reference and is available upon request. The current training plan manages certifications for employees meeting the qualification described in (1)-(7) above.

Measurable Goals: In permit year 1, review and revise, as needed, the existing written training plan. For the permit term, implement the training plan.

Annual Reporting and Record Keeping: In the annual report, submit a summary to include a list of training events conducted during the reporting period, the date of the training event, the number of employees who attended the training event and the objective of the training (Permit #VAR040007, Part I.E.6.q.(5)).

Responsible Party: DPW