



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

REPLY TO
ATTENTION OF

SEP 30 2016

Directorate of Public Works

Mr. Bryant Thomas, Water Permits Manager
Virginia Department of Environmental Quality, Northern Regional Office
13901 Crown Court
Woodbridge, Virginia 22193

Dear Mr. Thomas:

Enclosed is the Annual Report for the Fort Belvoir Small Municipal Separate Storm Sewer Systems (MS4) Permit #VAR040093 for the reporting period July 1, 2015 – June 30, 2016. Additionally the revised MS4 Program Plan with the new Delegation of Signature Authority and the Bacteria Total Maximum Daily Limit Action Plan for Lower Accotink Creek is enclosed.

Point of contact (POC) is Mr. Felix M. Mariani, Chief, Environmental and Natural Resources Division, at 703-806-3193 or email: felix.m.mariani3.civ@mail.mil. Technical POC is Ms. Pamela Couch, Stormwater Program Manager, Environmental and Natural Resources Division, at 703-806-3406 or email: pamela.j.couch2.civ@mail.mil.

Sincerely,


Bill Sanders
Director

Enclosures

“LEADERS IN EXCELLENCE”

**VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VDPES)
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4) PERMIT
FORT BELVOIR ANNUAL REPORT
JULY 1, 2015 – JUNE 30, 2016**

Information provided in this annual report is provided as specified in the “Annual Report Components” provided by Virginia Department of Environmental Quality via email on July 6, 2015. No additional guidance was received from Virginia Department of Environmental Quality for the 2015 – 2016 report so the same format is used from the previous reporting period.

A. Background Information (9VAC25-890-40, E.3.a)

1. Name and permit number of the program submitting the annual report:

US Army, Fort Belvoir, Virginia
MS4 Permit Number VAR040093

2. Annual Report Year: July 1, 2015 – June 30, 2016

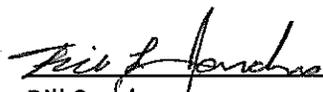
3. Modifications to any operator’s department’s roles and responsibilities: NONE

4. Number of new MS4 outfalls and associated acreage by HUC added during the permit year: There were six new outfalls added during the reporting period July 1, 2015 – June 30, 2016 as a result of the North Post Golf Course Realignment Project. See Table 1.

Table 1. New MS4 Outfalls (July 1, 2015 – June 30, 2016)				
Outfall ID per plan	Approximate Latitude & Longitude	VAHU6 Code	Contributing Area (Acreage)	Fort Belvoir MS4 Structure ID Number
10A	38°43'46.021"N 77°09'08.993"W	PL27 Dogue Creek	3.6	MS4 Structure ID 7284
26	38°43'40.459"N 77°09'32.800"W	PL30 Accotink Creek	8.19	MS4 Structure ID 7281
28	38°43'46.595"N 77°09'02.250"W	PL27 Dogue Creek	3.75	MS4 Structure ID 7285
41	38°43'36.322"N 77°09'31.532"W	PL30 Accotink Creek	3.41	MS4 Structure ID 7280

Table 1. New MS4 Outfalls (July 1, 2015 – June 30, 2016)				
Outfall ID per plan	Approximate Latitude & Longitude	VAHU6 Code	Contributing Area (Acreage)	Fort Belvoir MS4 Structure ID Number
42	38°43'40.960"N 77°09'30.881"W	PL30 Accotink Creek	2.56	MS4 Structure ID 7282
43	38°43'45.213"N 77°09'30.049"W	PL30 Accotink Creek	1.59	MS4 Structure ID 7283

5. **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."*



 Bill Sanders
 Director of Public Works

30 Sep 16

 Date

VAR0040093

 MS4 Permit Number

Fort Belvoir

 MS4 Name

B. Minimum Control Measure Implementation

1. MCM#1 – Public Education and Outreach

- a. **Permit Section II.B.1.g(1): A list of education and outreach activities conducted during the reporting period for each high-priority water quality issue, the estimated number of people reached and an estimated percentage of the target audience or audiences that will be reached.** Seven education and outreach activities were conducted during the reporting period July 1, 2015 – June 30, 2016. See Table 2 for a list of activities conducted and the associated data. Supporting documentation (newspaper articles, resident responsibility guide and brochures) is available upon request.

Table 2. Education and Outreach Activities (July 1, 2015 – June 30, 2016)

Date	Water Quality Issue	Communication Media Used	Estimated Number of people reached	Matrix Assumptions	Estimated % of target audience reached
9/17/15	Sediments, nutrients, bacteria	Print Media; Newspaper - <i>Belvoir Eagle</i> ; Article: <i>"Pollution Prevention Week Focuses on Water Quality"</i>	19,000	Total number of newspapers printed/ circulated = 19,000 with a population of 48,662 (Fort Belvoir Main, Fort Belvoir North Area and Housing Residents)	19,000/48,662 = 39%

Table 2. Education and Outreach Activities (July 1, 2015 – June 30, 2016)

Date	Water Quality Issue	Communication Media Used	Estimated Number of people reached	Matrix Assumptions	Estimated % of target audience reached
9/26/15	Other Pollutant: Pharmaceutical Chemicals	Print Media; Newspaper - <i>Belvoir Eagle</i> (9/24/16); Article: <i>"Dispose Old Medicine on Prescription Drug Take Back Day"</i> Email – One Call Now System (9/15/16); Flyer sent: <i>"National Prescription Take Back Day"</i>	19,000	Total number of newspapers printed/ circulated = 19,000 with a population of 48,662 (Fort Belvoir Main, Fort Belvoir North Area and Housing Residents)	19,000/48,662 = 39%
			7,380	Housing residential population = 8,200 with an average occupancy rate of 90% = 7380.	7,380/7,380 = 100%
1/5/15	Sediment, bacteria, nutrients	Print Media; Fort Belvoir Elementary School Career Day; See Section B.1.e for further description.	600	Student population was found at http://www.fcps.edu/FtBelvoirES/AboutOurSchool.html Population on website was 1,102 students as of May 1, 2016.	600/1102 = 54%

Table 2. Education and Outreach Activities (July 1, 2015 – June 30, 2016)

Date	Water Quality Issue	Communication Media Used	Estimated Number of people reached	Matrix Assumptions	Estimated % of target audience reached
01/15/16	Sediment, nutrients, bacteria	Print Media; <i>The Villages at Fort Belvoir Resident Responsibility Guide</i> ; Fort Belvoir Factsheets: <i>“Automobile Maintenance and Car Care – Tips for Homeowners”</i> ; <i>“Lawn Care, Fertilizer and Water Pollution”</i> ; <i>“Pet Waste and Water Quality”</i> .	3,321	Housing residential population = 8,200 with an average occupancy rate of 90% and turnover rate of 45% annually = 3,321 . Each new resident receives a copy of this guide.	3,321/3,321 = 100%
4/20/16	Sediment, nutrients, bacteria	Print Media; Earth Day; See Section B.1.e. for further description.	125	Approximately 125 participants attended.	125/48,662 = <1%

Table 2. Education and Outreach Activities (July 1, 2015 – June 30, 2016)					
Date	Water Quality Issue	Communication Media Used	Estimated Number of people reached	Matrix Assumptions	Estimated % of target audience reached
5/19/16	Sediment, nutrients, bacteria	Print Media; Newspaper - <i>Belvoir Eagle</i> ; Article: "Every Homeowner, Resident Can Help the Chesapeake Bay"	19,000	Total number of newspapers printed/circulated = 19,000 with a population of 48,662 (Fort Belvoir Main, Fort Belvoir North Area and Housing Residents)	19,000/48,662 = 39%
6/30/16	Nutrients, bacteria	Print Media; Newspaper - <i>Belvoir Eagle</i> ; Article: "Every Homeowner, Resident Can Help the Chesapeake Bay"	19,000	Total number of newspapers printed/circulated = 19,000 with a population of 48,662 (Fort Belvoir Main, Fort Belvoir North Area and Housing Residents)	19,000/48,662 = 39%

- b. Permit Section II.B.1.g(2):** A list of the education and outreach activities that will be conducted during the next reporting period for each high-priority water quality issue, the estimated number of people reached and an estimated percentage of the target audience or audiences that will be reached. A list of education and outreach activities planned for Permit Year 4 (July 1, 2016 – June 30, 2017) may be found in Table 3.

Table 3. Education and Outreach Activities (July 1, 2016 – June 30, 2017)				
Date	Water Quality Issue	Communication Media Used	Estimated Number of people reached	Estimated % of target audience reached
Sept 2016	Sediment, nutrients, bacteria	Newspaper – <i>Belvoir Eagle</i>	19,000	19,000/48,662 = 39%
Oct 2016	Other Pollutants (Salt)	Newspaper – <i>Belvoir Eagle</i>	19,000	19,000/48,662 = 39%
Nov 2016	Sediment, nutrients, bacteria	Fort Belvoir Elementary School Career Day	600	600/1102 = 54%

Table 3. Education and Outreach Activities (July 1, 2016 – June 30, 2017)				
Date	Water Quality Issue	Communication Media Used	Estimated Number of people reached	Estimated % of target audience reached
Mar 2017	Sediment, nutrients, bacteria	Newspaper – <i>Belvoir Eagle</i>	19,000	19,000/48,662 = 38%
April 2017	Sediment, nutrients, bacteria	Earth Day	100	100/ 48,662 = <1%
May 2017	Nutrients	Newspaper – <i>Belvoir Eagle</i>	19,000	19,000/48,662 = 38%

- c. Status of compliance with permit conditions:** For the reporting period, July 1, 2015 - June 30, 2016, Fort Belvoir completed the following actions to maintain compliance with permit conditions:
- As required by Section II, B.1 of the permit, the *U.S. Army, Fort Belvoir, Virginia Municipal Separate Storm Sewer Systems (MS4) Public Education and Outreach Plan* was reviewed for adequacy and revision is underway and is expected to be completed by December 2016. This Plan is available upon request;
 - As required by Section II, B.1 of the permit, education and outreach activities were designed and conducted to reach an equivalent 20% of each high-priority issue target audience. See Table 2 for a list of activities conducted during this permit cycle. Six out of the seven activities conducted exceeded the goal of reaching 20% of the target audience.
- d. BMP Assessment:** BMP 1.1 for the Public Education and Outreach MCM continues to remain effective and utilizes various communication media (newspaper, Facebook, email mass notification, fact sheets) available within the Fort Belvoir organization.
- e. Progress toward achieving the measurable goals identified in the MS4 Program Plan:** Status of achieving the measurable goal identified in the MS4 Program Plan is as follows:
- BMP 1.1 Develop and Implement a Public Education and Outreach Plan:** The measurable goals to annually conduct sufficient education and outreach activities designed to reach an equivalent of 20% of each high-priority issue target audience and to annually review the Public Education and Outreach Plan and revise, as needed were met during the reporting period July 1, 2015- June 30, 2016 based on the following:

- Sufficient education and outreach activities were designed and conducted to reach an equivalent of 20% of the target audience for the identified high priority water quality issues. See Table 2 for a list of activities conducted during the reporting period;
- The Public Education and Outreach Plan was reviewed and revision is underway and expected to be completed by December 2016;
- A new Facebook page, <https://www.facebook.com/Fort-Belvoir-DPW-Stormwater-1050650608312490/>, specifically for stormwater was launched to present water quality information and public outreach/involvement events and receive comments/complaints;
- Content for the draft website, <http://www.belvoir.army.mil/dpw/enrd/natStormWaterErosion.asp>, remained under review by Fort Belvoir leadership for approval and launch;
- Information on Watershed Protection to School Groups was presented at Fort Belvoir Elementary School's Annual Career Day on November 5, 2015. Two stormwater staff members from Fort Belvoir Directorate of Public Works (DPW), Environmental and Natural Resources Division (ENRD) attended Career Day at the Fort Belvoir Elementary School. One staff member specifically discussed stormwater careers and what the children can do to improve stormwater quality and how their daily actions can impact the water quality of adjacent waterways like the Potomac River and ultimately, the Chesapeake Bay. The EnviroScape Watershed/Nonpoint Source Model was utilized to demonstrate how nonpoint sources of pollution can impact water quality. Copies of stormwater educational materials were on display and included the U.S. EPA brochure entitled, "*After the Storm: A Citizens Guide to Understanding Stormwater* (EPA 833-B-03-002, January 2003) and Fort Belvoir brochures entitled, "*Are You Cleaning Up After Your Pet?*" and "*Don't Dump Here...It Ends Up Here*". Approximately 600 students, Kindergarten through 6th Grade, attended.
- Earth Day activities were conducted by DPW ENRD stormwater staff on April 20, 2016. One activity was conducted at the Accotink Bay Wildlife Refuge Environmental Education Center by DPW ENRD staff. Fifteen children from the Child Development Center attended the activity. DPW ENRD staff utilized an interactive EnviroScape Watershed, Nonpoint Source, Stormwater Pollution and Prevention Education Model (<http://www.envirosapes.com>). Additionally, an interactive display was staffed by DPW ENRD at the AAFES Main Exchange during lunch hour. Approximately 100 people visited the interactive display which demonstrated sources of illicit discharges. Copies of stormwater educational

materials were on display and included the U.S. EPA brochure entitled, *“After the Storm: A Citizens Guide to Understanding Stormwater* (EPA 833-B-03-002, January 2003) and Fort Belvoir brochures entitled, *“Are You Cleaning Up After Your Pet?”* and *“Don’t Dump Here...It Ends Up Here”*.

- Family Housing Orientation was supported by publishing stormwater quality flyers on Pet Waste, Automobile Maintenance and Car Care Tips for Homeowners and Lawn Care, Fertilizer and Pollution in “The Villages at Fort Belvoir Resident Responsibility Guide” found at https://www.villagesatbelvoir.com/wp-content/uploads/RRG_revised-090315.pdf (See pages 94 - 97 for the stormwater quality flyers.) This Guide is distributed to all housing residents when they first move into Fort Belvoir housing.

2. MCM#2-Public Involvement/Participation

a. Permit Section II.B.2.d(1): A web link to the MS4 Program Plan and annual report;

Copies of the updated MS4 Program Plan and this annual report will be posted on the Fort Belvoir website <https://www.belvoir.army.mil/environdocssection.asp> by October 30, 2016.

b. Permit Section II.B.2.d(2): Documentation of compliance with the public participation requirements of this section.

Four public participation activities were conducted during the reporting period July 1, 2015 – June 30, 2016. See Table 4 for a list of public participation activities that were conducted. Supporting documentation is available upon request.

Table 4. Public Participation Activities		
Date	Name of Event/Activity	Description
9/27/15	29 th International Coastal Cleanup/Public Lands Day	Number of volunteers: 3 Trash collected: 15 bags, 1 battery
3/12/16	Cub Scout Den 11, Pack 118 Cub Scout Pack 1519	Number of Volunteers: 15 Trash collected: 3 bags Number of Volunteers: 18 Trash collected: 9 bags
4/3/16	Potomac River Watershed Cleanup	Number of volunteers: 50 Trash collected: 50 bags, approx.. 13 tires
4/16/16	Route 1 Cleanup	Volunteers: 150 Trash collected: 50

c. Status of compliance with permit conditions:

For the reporting period, July 1, 2015 - June 30, 2016, Fort Belvoir completed the following actions to maintain compliance with permit conditions:

- Posted the MS4 Program Plan and annual report on the Fort Belvoir website on October 19, 2015;
- Conducted four public participation activities (See Table 4).

d. BMP assessment:

All BMPs (BMP 2.1 – 2.3) for the Public Involvement/Participation MCM continue to remain effective and meet permit requirements.

e. Progress toward achieving measurable goal identified in the MS4 Program Plan

Status of achieving the measurable goals identified in the MS4 Program Plan are as follows:

BMP 2.1 Public Participation: The measurable goal to participate, through promotion, sponsorship or other involvement, in a minimum of four local activities annually was met during the reporting period July 1, 2015 – June 30, 2016. Fort Belvoir participated in four local activities as described in Table 4.

BMP 2.2 Publish the MS4 Program Plan and Annual Reports on the Fort Belvoir

Website: The measurable goal to update the MS4 Program Plan at a minimum once per year and in conjunction with the annual report and post copies of the MS4 Program Plan and annual report on the Fort Belvoir webpage within 30 days of submittal to VADEQ was met during the reporting period July 1, 2015 – June 30, 2016. The MS4 Program Plan was updated in September 2015 and this plan and the annual report were posted to the Fort Belvoir webpage

http://www.belvoir.army.mil/environdocssection_MS4AnnualReport.asp on October 19, 2015.

BMP 2.3 Provide for Public Notification and Receipt of Comments on the MS4 Program Plan: The measurable goal for this BMP will be implemented in Permit Year 5.

3. MCM#3 – Illicit Discharge Detection and Elimination

a. Permit Section II.B.3.f(1): A list of any written notifications of physical interconnection given by the operator to other MS4s: Not Applicable

b. Permit Section II.B.3.f(2): The total number of outfalls screened during the reporting period, the screening results, and detail of any follow-up actions necessitated by the screening results: Total number of outfalls screened by the Outfall Reconnaissance Inventory (ORI) during the reporting period July 1, 2015 – June 30, 2016 was 50 outfalls.

Five outfalls (MS4 Structure ID 509, 969, 984, 2796 and 6244) from the previous reporting period remained on the re-screening list for 2015-2016 ORI. The 2015 – 2016 ORI results are as follows:

MS4 Structure ID 509: Initial flow was noted on October 29, 2014. This is an outfall associated with Building 808, old Dewitt Hospital. Three follow-up source tracking investigations were conducted on November 14, 2014, January 23, 2015 and April 10, 2015. These investigations involved visual evaluation of the storm sewer system and investigation inside Building 808 to determine the source. The investigation inside the building on April 10, 2015 revealed that the discharge appeared to be coming from a sump pump that had a HVAC treatment process attached. No discharge from the pump was occurring due to the power to the building being shut off due to upcoming demolition and because pipes had ruptured in the winter. Confirmation that the illicit discharge was no longer active was conducted at the outfall. During the 2015 – 2016 permit year, demolition of Building 808 started and the storm sewer section associated with this outfall is planned to be abandoned in place (filled with concrete). This outfall will be placed on a list for DPW personnel to re-screen visually on a quarterly basis during the 2016-2017 permit year to ensure that no flow remains. This outfall will be rescreened during the 2016–2017 ORI to verify that the discharge has been eliminated.

MS4 Structure ID 969: During the 2014-2015 ORI, this outfall was noted to have some indicators of illicit discharge so this outfall remained on the 2015-2016 ORI. When this outfall was screened on November 23, 2015, it was noted to have no flow. However, suds and indicators of past potential illicit discharge was located immediately downstream of the outfall. The drainage area was investigated and a single inlet was noted in the loading dock area of the Holiday Inn Express in Knadle Hall, Building 470. In 2016/2017 permit year, DPW ENRD will provide educational training to the hotel staff and analyze the feasibility of putting storm drain markers on the inlet noted during the ORI follow-up investigation. This outfall will be placed on a list for DPW personnel to re-screen visually on a quarterly basis during the 2016-2017 permit year to ensure that

no dry weather flow remains. This outfall will be rescreened during the 2016–2017 ORI to verify that the discharge has been eliminated.

MS4 Structure ID 984: During the 2014-2015 ORI, this outfall was noted to have some indicators of illicit discharge but no flow was noted so this outfall remained on the 2015-2016 ORI. When this outfall was rescreened on November 23, 2015, there was a flow noted. Source investigations conducted on April 14, 2016 concluded that the source of illicit discharge was most likely a boiler located in the basement of Building 247 that was connected to the storm sewer. The boiler for this building was in the process of being decommissioned in April 2016. This outfall will be rescreened during the 2016–2017 ORI to verify that the discharge has been eliminated.

MS4 Structure ID 2796: Initial discovery of the illicit discharge was made on October 30, 2014. A follow-up inspection/source tracking was conducted on November 14, 2014. Several potential sources for illicit discharge were identified by walking the drainage area, making observations inside buildings and nearby storm drains and interviewing building personnel. On subsequent outfall inspections conducted on January 23, 2015 and February 10, 2015, no flow was observed at this outfall. Because of the intermittent nature of this illicit discharge, a level logger and pressure inducer were installed in the outfall to determine when dry weather flows occur. However, no pattern was found because flows were too low to measure. This outfall will be placed on a list for DPW personnel to re-screen visually on a quarterly basis during the 2016-2017 permit year to ensure that no flow remains. This outfall will be rescreened during the 2016–2017 ORI to verify that the discharge has been eliminated.

MS4 Structure ID 6244: Initial discovery of illicit discharge was made on October 30, 2014. This is an outfall associated with Fort Belvoir Community Hospital (Buildings 1229, 1230 and 1231). Based on unsuccessful source tracking conducted during 2014-2015 and the intermittent nature of this discharge, this outfall was re-screened during the 2015-2016 ORI on September 21, 2015. During the re-screening, a substantial flow was present and a source investigation was conducted. It was determined that a cistern was being refilled with potable water to provide water for the irrigation system when adequate rainwater was not available to fill the cistern. The cistern was not designed with a mechanism to shut off the potable water once the cistern was full. As a result, water was overflowing directly into the pipe that led to the outfall. This outfall will be re-screened during the 2016-2017 ORI.

Illicit discharge investigations were initiated at four new outfalls (MS4 Structure ID 1715, 2924, 3590 and 4470). The 2015 – 2016 ORI results are as follows:

MS4 Structure ID 1715: During the ORI initial screening on November 24, 2015 a trickle flow was present. DPW ENRD and contractor staff conduct a follow-up source investigation on April 4, 2016. It is suspected that there is a potable water leak in the area. Additional investigation will be conducted during 2016 – 2017 and this outfall will be re-screened during the 2016 – 2017 ORI.

MS4 Structure ID 2924: During the initial screening on November 23, 2015 a trickle flow was present and carried a sewage and sulfide odor. Multiple other indicators were also noted such as flow line, oil sheen, suds and elevated ammonia. A source investigation was conducted and it is suspected that the elevated levels of ammonia may be due to natural decomposition of a large quantity of organic material noted in the area. This outfall will be re-screened during the 2016 – 2017 ORI.

MS4 Structure ID 3950: During the initial screening on November 23, 2015, a milky white substance was noted to be discharging from the outfall. A follow-up source investigation was conducted on April 14, 2016 and no discharge was present. Building 1822, a dining facility, was being decommissioned and renovated. A site inspection noted exposed piles of sediment, construction debris and a grease container. DPW ENRD reported the deficiencies to the Contracting Officer Representative after returning from the investigation. Deficiencies were corrected by contractor conducting the renovation. This outfall will be re-screened during the 2016 – 2017 ORI and new use of the renovated building will be evaluated for stormwater pollution risks.

MS4 Structure ID 4470: During the initial screening on November 23, 2015, elevated ammonia levels were present and the outfall was noted to be crushed but no other illicit discharge indicators were present. A follow-up source investigation was conducted on April 14, 2016. However, the outfall was fully submerged by the tide. Based on investigation of manholes up the trunk, it is suspected that residential homes have sump pumps tied into the storm drain and is the source of this discharge. This outfall will be re-screened during the 2016 – 2017 ORI.

Seventeen outfalls were identified for re-screening during the 2016 – 2017 ORI. The nine outfalls discussed above will be re-screened. In addition, eight of the outfalls that were characterized as having a potential for illicit discharges due to possible physical

indicators (olfactory indicators, poor pool quality and outfall damage) during the 2015-2016 ORI will be re-screened.

- c. Permit Section II.B.3.f(3): A summary of each investigation conducted by the operator of any suspected illicit discharges:** A total of 21 illicit discharges were investigated for any suspected illicit discharges during the reporting period July 1, 2015 – June 30, 2016. Illicit discharges were discovered utilizing the ORI, windshield inspections, Army Headquarters audit and complaint investigations. See Appendix A for a summary of investigation conducted for suspected illicit discharges.
- d. Status of compliance with permit conditions:** For the reporting period, July 1, 2015 – June 30, 2016, Fort Belvoir completed the following actions to maintain compliance with permit conditions:
- The *U.S. Army, Fort Belvoir, Virginia Illicit Discharge Detection and Elimination Plan* was reviewed and revision is underway and will be completed by June 2017;
 - ORI conducted on 50 outfalls;
 - Twenty-one suspected illicit discharge were investigated;
 - Weekly windshield inspections were conducted;
 - Illicit discharge education was conducted.
- e. BMP assessment:** BMPs (BMP 3.1 – 3.5) for the Illicit Discharge Detection and Elimination MCM continue to remain effective and meet permit requirements.

BMP 3.6 Develop and Provide an Integrated Annual Training Program will be incorporated into the Master SWPPP that will be completed by June 30, 2017 and no longer needs to be individually noted in the MS4 Program Plan.

BMP 3.7 Implement Fort Belvoir Pollution Complaint “Hot Line” will be incorporated into the *U.S. Army, Fort Belvoir, Virginia Public Education and Outreach Plan, June 2015* that is currently under review and scheduled to be completed in December 2016 and no longer needs to be individually noted in the MS4 Program Plan.

- f. Progress toward achieving measurable goal identified in the MS4 Program Plan**
Status of achieving the measurable goals identified in the MS4 Program Plan are as follows:

BMP 3.1 Develop, Implement, Update and Support Geospatial Information System (GIS) Layers: The measurable goal to develop, implement, update and support GIS

layers containing stormwater systems, watershed/subwatershed boundaries, utility data and other information pertinent to stormwater management to reflect changes or new information was met during the reporting period July 1, 2015 – June 30, 2016. GIS data associated with the outfall reconnaissance inventory was updated.

BMP 3.2 Implement and Update the *U.S. Army, Fort Belvoir, Virginia Illicit Discharge Detection and Elimination (IDDE) Plan*: The measurable goal to annually update the IDDE Plan, as needed, and implement the plan was met during the reporting period July 1, 2015 – June 30, 2016.

The IDDE Plan was reviewed and a revision will be completed during permit year 4. Additionally, an outfall reconnaissance inventory (ORI) of 50 identified outfalls to detect illicit discharges was performed. The *U.S. Army, Fort Belvoir, Virginia 2015 – 2016 Outfall Reconnaissance Inventory Final Report, June 2016* documents findings of this the ORI. A copy of this report is available upon request.

An Army Headquarters audit was conducted by Army Environmental Command for all of Fort Belvoir environmental programs on September 21 – 24, 2015. A total of eight facilities were inspected to determine if stormwater permit violations were occurring at the facilities. Any deficiencies that were noted were reported to the appropriate personnel to make corrections.

Weekly windshield inspections were started on October 9, 2015 resulting in 11 erosion and sediment control deficiencies found which were directly reported to the erosion and sediment control inspector for the project site, two deficiencies found on stormwater management facilities which were directly reported to the Stormwater Facility Maintenance Manager and one deficiency noted on the illicit discharge investigation summary, Incident #16-15.

BMP 3.3 Develop a Plan for Operations That May Affect Stormwater: The measurable goal to develop an assessment plan to identify and evaluate other routine operations such as waterline flushing, golf course irrigation, basement drains and condensation drains was met for the reporting period July 1, 2015 – June 30, 2016. The privatized waste-water/water partner (American Water) has established procedures when conducting fire hydrant flushing which incorporates the use of a diffuser cone with a de-chlorination table feeder (bisulfate tablets). American Water (AW) staff also utilizes de-chlorination mats to cover large stormwater grates during hydrant flushing. These mats are also utilized in the event of a large drinking waterline break to protect

streams. This reporting period, a new method of hydrant flushing was analyzed. Instead of flushed water being discharged to the ground (and then to the nearest storm sewer), the water filters through a turbidity filter on the truck, is re-pressurized and is entered back into the next downstream hydrant via a hose. This process, called Neutral Discharge Elimination System (NODES), is advertised as a zero discharge activity. However, a trickle discharge from the truck was noted during the demonstration, but was considered to be negligible. AW utilized the NODES for approximately ½ of the annual flushing this year. The other half of the annual flushing utilized the de-chlorination method.

Additionally, a Stormwater Pollution Prevention Plan is under development and will evaluate other routine operations that may contribute to stormwater pollution. The SWPPP was not completed as originally planned by June 30, 2016. However, in accordance with 9VAC25-890-40, Section II, B.6.b.(3), the plan will be completed by June 30, 2017 (within 48 months of coverage under the MS4 permit).

BMP 3.4 Perform Routine Operation Assessments and Develop BMPs: The measurable goal to implement the routine operations assessment plan was met for the reporting period July 1, 2015 – June 30, 2016. Fort Belvoir is planning to implement the assessment plan in permit year 4 as part of the SWPPP.

BMP 3.5 Evaluate Potential Combined Sewer Overflow Connections: The measurable goal to conduct and/or evaluate studies of potential combined sewer overflow connections and develop recommendations and/or mitigation actions was met during the reporting period July 1, 2015 – June 30, 2016.

It is standard procedure that if the privatized waste-water/water partner, American Water, discovers any connections of the sanitary sewer to the storm sewer system, funding will be requested to evaluate and correct cross connections. There were no cross connections found by AW during this reporting period. In addition, 23,360 feet of aged sanitary sewer lines were replaced during the reporting period to minimize the risk of a sanitary sewer discharge occurring because of failed or deteriorating sanitary sewer line.

A stormwater management study in the Fort Belvoir Historic District (Area 200) is currently underway. This study is designed to investigate the possibility of roof drains being connected to the sanitary sewer and includes a general review of the potential Low Impact Development (LID) opportunities in order to meet the Energy Independence

and Security Act, Section 438 requirements and to assist towards the water quality goals set by the Chesapeake Bay TMDL and the MS4 Permit. Field investigations utilizing remote camera will begin in Fall 2016.

BMP 3.6 Develop and Provide an Integrated Annual Training Program: The measurable goal to conduct annual training for Fort Belvoir staff performing related industrial practices to increase awareness of the implications of illicit discharges and improper waste disposal was met for the reporting period July 1, 2015 – June 30, 2016.

As part of the permit conditions for the VPDES General Permit VAR051080 for Industrial Stormwater Discharges at Davison Army Airfield, the annual training on the Stormwater Pollution Prevention Plan (SWPPP) was conducted by DPW ENRD staff on December 1, 2015 and January 8, 2016. Three hundred and sixty military and civilian personnel attended the training. This training consisted of staff awareness of potential contamination from airfield operations to the stormwater system, BMPs and illicit discharge elimination. This training has integrated information on general stormwater quality protection and there is an open invitation to all of Fort Belvoir personnel including tenant activities and the fire department.

In addition, a pre-construction Erosion and Sediment Control/Stormwater Management training was developed and is provided to all construction contractors prior to commencement of construction. As part of the Land Disturbance Letter, construction contractors are provided a copy of EPA's factsheet "*Stormwater Best Management Practice Concrete Washout*" to educate them on the proper management/disposal of concrete washout water and a copy of the Fort Belvoir Spill Response Procedures and one-on-one education is provided during bi-weekly inspections on proper construction material storage (ie. fuel cans, hydraulic fluid, oil, Quickrete) and equipment fueling procedures.

Also, stormwater pollution prevention/illicit discharge training was conducted on January 6, 2016 for 39 Fort Belvoir Community Hospital Environmental Compliance Officers in response to an illicit discharge incident discovered on November 20, 2015.

BMP 3.7 Implement Fort Belvoir Pollution Complaint "Hot Line": The measurable goal to monitor concerns and provide responses to individuals raising questions or concerns was exceeded for the reporting period July 1, 2015 – June 30, 2016. Avenues that may be utilized by anyone to raise a question or complaint regarding environmental protection include: Maintenance of a Garrison Staff Directory with the Commander's

Hotline phone number and email address, maintenance of a Fort Belvoir Quick Telephone Directory on the Fort Belvoir website <https://www.belvoir.army.mil/BOS.asp> and maintenance and monitoring of Fort Belvoir's Facebook site (This site was monitored by a DPW ENRD staff person once a week for comments posted that would be of environmental concern.)

Additionally, during this reporting period, a new Facebook page, <https://www.facebook.com/Fort-Belvoir-DPW-Stormwater-1050650608312490/>, specifically for stormwater was launched to present water quality information, advertise public outreach/involvement events and receive comments/complaints. Also a new email inbox was established to receive comments/complaints. Email address is usarmy.belvoir.imcom-atlantic.mbx.dpw-enrd-stormwater@mail.mil. One comment/concern was received via the stormwater email concerning erosion and sediment control and zero comments were received via the DPW Stormwater Facebook page.

4. MCM#4 – Construction Site Stormwater Runoff Control

- a. Permit Section II.B.4.f(1): Total number of regulated land-disturbing activities.** There were 20 projects that were operating under a Construction General Permit for the reporting period July 1, 2015 – June 30, 2016.
- b. Permit Section II.B.4.f(2): Total number of acres disturbed.** There were 195.50 acres of total regulated disturbance during the reporting period July 1, 2015 – June 30, 2016.
- c. Permit Section II.B.4.f(3): Total number of inspections conducted.** A total of 751 inspections were conducted during the reporting period July 1, 2015 – June 30, 2016.
- d. Permit Section II.B.4.f(4): A summary of enforcement actions taken, including the total number and type of enforcement actions.** Three enforcement actions were taken during the reporting period. For the first action, a Letter of Non-Compliance was sent to the Construction Manager for multiple repeat violations with minimum standards. For the second and third action, an email notice of non-compliance was sent to U.S. Army Corps of Engineers (USACE), Resident Engineer for both projects under USACE's construction contract oversight for repeat violations of failure to establish permanent stabilization.
- e. Status of compliance with permit conditions.** For the reporting period, July 1, 2015- June 30, 2016, Fort Belvoir completed the following actions to maintain compliance with permit conditions:
 - Construction projects disturbing an acre or greater of land were required to obtain a Construction General Permit from VADEQ;
 - Erosion and sediment control inspections were conducted on construction projects with CGPs upon initial installation of erosion and sediment controls, at least once during every two-week period, within 48 hours of any runoff-producing storm event and upon completion of the project;
 - Construction projects disturbing 10,000 square feet or greater of land were required to obtain erosion and sediment control plan approval from VADEQ prior to construction commencement;
 - Construction projects disturbing an acre or greater of land were required to obtain erosion and sediment control AND stormwater management plan approval from VADEQ prior to construction commencement;
 - All Fort Belvoir Erosion and Sediment Control Inspectors maintained certificates of competence in accordance with 9VAC25-850-40;

- The *Fort Belvoir Directorate of Public Works, Municipal Separate Storm Sewer System (MS4) Program Bulletin #1: Stormwater Management (SWM) and Erosion and Sediment Control (ESC) Design, Review and Plan Approval Procedures and SWM and ESC Compliance Procedures during Construction* was revised and was distributed to all project proponents at the concept design phase of the project.
 - A Pre-Construction Erosion and Sediment Control/Stormwater Management Training was developed and was provided to all construction contractors prior to commencement of construction.
- f. **BMP assessment:** BMPs (BMP 4.1 – 4.6) for the Construction Site Stormwater Control MCM continue to remain effective and meet permit requirements.

BMP 4.7 Progressive Compliance Enforcement Strategy was amended to include telephone notification to VADEQ Northern Regional Office when a contractor fails to obtain a Construction General Permit and/or an approved stormwater management and/or erosion and sediment control plan from VADEQ prior to start of construction.

g. **Progress toward achieving measurable goal identified in the MS4 Program Plan**

Status of achieving the measurable goals identified in the MS4 Program Plan are as follows:

BMP 4.1 Establish a Construction Project Review Procedure: The measurable goal to establish a procedure to review construction projects and evaluate the project's potential to impact water quality and compliance with the MS4 Permit, state and federal regulations was met for the reporting period July 1, 2015 – June 30, 2016. The *Fort Belvoir Directorate of Public Works, Municipal Separate Storm Sewer System (MS4) Program Bulletin #1: Stormwater Management (SWM) and Erosion and Sediment Control (ESC) Design, Review and Plan Approval Procedures and SWM and ESC Compliance Procedures during Construction* was revised and is distributed to all project proponents at the concept design phase of the project. A copy of this bulletin is available upon request.

BMP 4.2 Communicate the Requirements of the Stormwater Program: The measurable goal to distribute MS4 permit requirements to designers during initial planning phases of construction projects was met during the reporting period July 1, 2015 – June 30, 2016. DPW ENRD distributed MS4 Bulletin #1 (See BMP 4.1) to designers for projects with greater than 2500 square feet of land disturbance. DPW ENRD provided the Fort Belvoir Home Page website address for copies of the MS4

General Permit and Fort Belvoir's Registration Statement, as well as the URL address for Virginia Code for direct access to the MS4 General Permit, the Virginia Stormwater and Erosion & Sediment Control Regulations and other documents that were requested.

BMP 4.3 Develop a Tracking System: The measurable goal to maintain an Excel spreadsheet to track project status was met during the reporting period July 1, 2015 – June 30, 2016. The Excel spreadsheet was updated monthly.

BMP 4.4 Obtain Registration under the General VPDES Permit for Discharges of Stormwater from Construction Activities (CGP) for Construction Projects: The measurable goal requiring construction projects that disturb an acre or greater of land to obtain a CGP prior to construction was met during the reporting period July 1, 2015 – June 30, 2016. There were 20 projects that were operating under a Construction General Permit for the reporting period July 1, 2015 – June 30, 2016.

BMP 4.5 Initiate Erosion and Sediment Control Site Inspections: The measurable goal to conduct site inspections for 100% of construction projects was met during the reporting period July 1, 2015 – June 30, 2016. Erosion and Sediment Control inspections were conducted once every two weeks and within 48 hours of a storm event that produced greater than .5" precipitation on all construction projects possessing a CGP. A total of 751 Erosion and Sediment Control inspections were conducted.

BMP 4.6 Evaluate Emerging Technologies: The measurable goal to review or evaluate one new product or engineering control was met during the reporting period July 1, 2015 – June 30, 2016. A stormwater management study in the Fort Belvoir Historic District (Area 200) is ongoing. This study includes a general review of the potential Low Impact Development (LID) opportunities in order to meet EISA 438 requirements and to assist towards the water quality goals set by the Chesapeake Bay TMDL and the MS4 Permit.

BMP 4.7 Progressive Compliance Enforcement Strategy: The measurable goal to implement the compliance and enforcement strategy when construction contractors have repeated non-compliance findings on bi-weekly erosion and sediment control inspections on an active construction site was met during the reporting period July 1, 2015 – June 30, 2016. Thirteen enforcement actions were taken during the reporting period. VADEQ conducted eight Level 2 Comprehensive Inspections and two Level 1 Focused inspections. Fort Belvoir issued one letter of Non-Compliance to the Construction Manager for multiple repeat violations with minimum standards. Fort

Belvoir issued two email notices of non-compliance to U.S. Army Corps of Engineers (USACE), Resident Engineer for repeat violations of failure to establish permanent stabilization on two construction sites that they were responsible for contract oversight.

5. MCM#5 – Post-Construction Stormwater Management

a. Permit Section II.B.5.e: The operator shall submit an electronic database or spreadsheet of all stormwater management facilities brought online during each reporting year. In addition, the operator shall annually track and report total number of inspections and when applicable, the number of enforcement actions taken to ensure long-term maintenance: Twelve stormwater management facilities were brought online during the reporting period July 1, 2015 – June 30, 2016. Appendix B contains a spreadsheet that lists these new facilities. Total number of maintenance inspections conducted were 233. The number of enforcement actions taken to ensure long-term maintenance is not applicable because maintenance is accomplished, as needed, by the Operations and Maintenance Contractor. Additionally, Fort Belvoir DPW ENRD coordinated with various operations and maintenance contractors working for tenant commands and mission partners (Residential Housing, Defense Logistics Agency, National Geospatial-Intelligence Agency and Aerospace Data Facility – East) to accomplish maintenance on stormwater management facilities located within their respective areas of responsibility.

b. Status of compliance with permit conditions: For the reporting period, July 1, 2015 – June 30, 2016, Fort Belvoir completed the following actions to maintain compliance with permit conditions:

- Required new construction projects to comply with Virginia Stormwater Management Program quantity and quality regulations;
- Required new construction projects greater than an acre to obtain VADEQ stormwater management plan approval;
- Conducted periodic stormwater management facility inspections during construction to ensure that a facility were constructed in accordance with the approved plan;
- Conducted inspections on 233 stormwater management facilities to determine maintenance requirements;
- Updated Access database.

c. BMP assessment: BMPs (BMP 5.1 – 5.9) for the Post-Construction Runoff Control MCM continue to remain effective and meet permit requirements.

d. Progress toward achieving measurable goal identified in the MS4 Program Plan

Status of achieving the measurable goals identified in the MS4 Program Plan are as follows:

BMP 5.1 Establish a Construction Project Review Procedure: The measurable goal to establish a procedure to review construction projects to evaluate the project's potential to impact water quality and the project's compliance with MS4 Permit, state (VSMP) and federal regulations (EISA 438) for stormwater management was met during the reporting period July 1, 2015 – June 30, 2016. MS4 staff reviewed construction plans for projects disturbing areas of 2,500 square feet and greater to determine if the stormwater design plans comply with the Virginia Erosion and Sediment Control Handbook, Fairfax County Public Facilities Manual, Virginia Stormwater Management Handbook, the Energy Independence and Security Act, Section 438 and Virginia Erosion and Sediment Control and Stormwater Management laws and regulations. A Land Disturbance Letter authorizing commencement of construction was issued once Erosion and Sediment Control and Stormwater Management Plans were reviewed and approved. A spreadsheet of all construction projects greater than 2,500 square feet under design review and a copy of the written procedure is available upon request.

BMP 5.2 Develop a Stormwater Management Facility Tracking System: The measurable goal to establish a tracking system to include information required by Section II, B.5.e. was met for the reporting period July 1, 2015– June 30, 2016. The Access database was revised to track stormwater management facilities/BMPs inventory and provide documentation of inspections and maintenance for each facility/BMP.

BMP 5.3 Initiate Periodic Stormwater Management Site Inspections: The measurable goal to establish periodic inspection procedures to determine adherence to the approved design plans and to observe status of the stormwater management facility/BMP was met during the reporting period July 1, 2015 – June 30, 2016. Five construction projects with stormwater management facilities were inspected periodically during construction to ensure that the new facilities were constructed in accordance with the approved design plans.

BMP 5.4 Provide Information on the Fort Belvoir DPW ENRD Website about Low Impact Development: The measurable goal to provide information on the Fort Belvoir DPW ENRD website about Low Impact Development (LID) was met for the reporting period July 1, 2015 – June 30, 2016. In May 2012, work began to extensively update an existing Fort Belvoir DPW ENRD website (<http://www.belvoir.army.mil/dpw/enrd/enrdMain.asp>) which will present stormwater

and general watershed information and will include information on Low Impact Development. Content for the draft website was completed in May 2014 and is currently in review by upper management for approval and launch. It is not known when this will be approved for launch. However, Low Impact Development (LID) requirements were incorporated into the *Fort Belvoir Directorate of Public Works, Municipal Separate Storm Sewer System (MS4) Program Bulletin #1: Stormwater Management (SWM) and Erosion and Sediment Control (ESC) Design, Review and Plan Approval Procedures and SWM and ESC Compliance Procedures during Construction* and this document will be posted on the Fort Belvoir website

<https://www.belvoir.army.mil/environdocssection.asp> by October 30, 2016.

BMP 5.5 Audits of Existing Stream Conditions: The measurable goal to perform an audit of the existing conditions of stream channels and banks, outfalls, etc. was met for reporting period July 1, 2015 – June 30, 2016. Beginning in July, DPW ENRD staff contracted to perform a visual inspection using various rapid assessments with photographic documentation for nine locations that were permitted and/or evaluated as jurisdictional stream channel. All of the stream locations were impacted to some degree by surrounding development due to either culvert extensions, culvert replacements, constructed outfall structures or construction on semi-improved or improved areas nearby. The reports documented the current conditions and made recommendations for any corrective actions needed in order to improve conditions of the streams.

BMP 5.6 Correction of Existing Watersheds The measurable goal to systematically correct watershed damages caused by existing conditions, poor design of control structures, or inadequate maintenance of control structures was met for the reporting period July 1, 2015 – June 30, 2016. DPW ENRD requested and received funds for the design of six stream restoration projects. The U.S. Army Corps of Engineers, Baltimore District, Water Resources Branch is currently working on completing two of the six stream restoration designs. These designs are expected to be completed in October 2016, based on schedule projections. Designs for the remaining stream restorations are expected to begin October 2016. These stream restoration designs are being completed for un-named tributaries to Dogue Creek and Accotink Bay.

BMP 5.7 Implement Periodic Inspections and Clean Out of Storm Drains: The measurable goal to develop inspection and maintenance standards for cleaning of storm drains and disposal of collected waste material was met for the reporting period July 1, 2015 – June 30, 2016. The Base Operations and Maintenance Contract provides for

rooting and flushing of storm drains and cleaning of catch basins including all manholes, culverts and open grass ditches annually. The Contractor is responsible for collection, analytical testing and proper disposal of waste material from storm drain clean out. The Contractor schedules cleaning of approximately ¼ of the storm drains annually such that all of the storm drain system is cleaned every 4 years.

From April 1, 2016 to June 30, 2016, 27,611 linear feet of storm drain and 1,245 catch basins were cleaned on Fort Belvoir including Davison Army Airfield's stormwater conveyance system.

BMP 5.8 Ensure Functionality of Existing Stormwater Management Structures: The measurable goal to inspect 20% of stormwater BMPs annually was exceeded for the reporting period July 1, 2015 – June 30, 2016. Operational inspections required by Fort Belvoir's General Plan for Stormwater Facility Inspection and Maintenance were conducted for 233 BMPs between 21 October 2015 and 24 June 2016 with support from the Baltimore District US Army Corps of Engineers. Operational logs were created for each BMP using the Stormwater BMP Database. An overall condition rating was generated for each BMP to assist in prioritizing maintenance.

Stormwater BMP Rating Description

Rating	Description
A	The BMP is functioning as designed with no problem conditions identified. No signs of impending deterioration.
B	Minor problems are observed, however BMP is functioning as designed with no problem conditions in critical parameters.
C	Minor problems are observed, however BMP is functioning as designed with no problem conditions in critical parameters, but BMP performance is being compromised.
D	Major problems are observed and BMP is not functioning as designed with problem conditions in several critical parameters. Conditions have compromised the BMP performance.
E	Major problems are observed and BMP is not functioning as designed with problem conditions in several critical parameters. Conditions have compromised the BMP performance. BMP shows signs of impending failure.

The below-ground BMPs were in good condition, with some having minor sediment deposits. A number of above-ground BMPs were observed to have deficiencies. It was recommended that all above ground BMP (i.e. detention, extended detention and infiltration basins) embankments be mowed a minimum of twice per year to manage groundcover, prevent growth of woody vegetation, and allow for observations and inspections.

Work requests were generated for maintenance on 37 above ground BMPs that received condition ratings of C, D or E as well as for maintenance on 31 Tree Box Filters. The work requests are pending funding.

Inspection and maintenance plan, inspection and maintenance logs and a BMP location map are available upon request.

BMP 5.9 Support Stream Restoration: The measurable goal to support one stream restoration project during the 5-year permit cycle was met for the reporting period July 1, 2015 – June 30, 2016. The Meade Road Stream Restoration Project was completed on March 24, 2016 which restored 695.7 linear feet of stream channel on an un-named tributary of Accotink Creek. The project entered the Nationwide Permit #27 five-year monitoring period for monitoring of channel stability and restoration success criteria as required by the permit and approved monitoring plan.

6. MCM#6-Pollution Prevention/Good Housekeeping for Municipal Operators

- a. Permit Section II.B.6.g(1) A summary report on the development and implementation of the daily operational procedures:** Road, street and parking lot maintenance is currently contracted out and the original contract specifications did not include written procedures designed to minimize or prevent pollutant discharge from contractor daily operations. Contract specifications are under review and the written procedures will be incorporated for the next contract. In addition, to mitigate the current contract situation, pollution prevention training will be conducted annually instead of biennially as required by Section II, B.6.d.(2).

Written procedures for the application, storage, transport, and disposal of pesticides, herbicides and fertilizers are incorporated in the Integrated Pest Management Plan that is reviewed annually.

Maintenance for government-owned automobiles are conducted offsite. Written procedures for military motor pools and one do-it-yourself auto mechanic facility have been incorporated into the Master SWPPP which is currently in draft format and under review. The Master SWPPP will be completed by June 30, 2017.

- b. Permit Section II.B.6.g(2) A summary report on the development and implementation of the required SWPPPs:** Fort Belvoir received funding and awarded a contract in August 2014 for the development of a Master SWPPP. The SWPPP is currently in draft and under review and will be completed by June 30, 2017.
- c. Permit Section II.B.6.g(3) A summary report on the development and implementation of the turf and landscape nutrient management plans that includes: total acreage of lands where turf and landscape nutrient management plans are required and acreage of lands where plans have been implemented:** Fort Belvoir identified 382 acres of managed turf that is required to be addressed by nutrient management plans. Fort Belvoir developed a nutrient management plan for the golf course (119 acres), eleven (115 acres) of the fifteen housing neighborhoods and the Missile Defense Agency (6 acres). To date, 63% (240/382) of the total managed turf is covered by nutrient management plans. Future development of the additional plans for managed turf within the remaining four housing areas, Defense Logistics Agency and Fort Belvoir North Area is planned.
- d. Permit Section II.B.6.g(4): A summary report on the required training, (list of training event, date, number of employees and objective):** A total of 693 civilians, military and

contractor employees were trained during the reporting period. See Table 7 for a summary of training events conducted.

Table 7. Training Events Conducted			
Date	Audience	Number of Employees	Training objective(s):
9/28/15	Command Leaders – Environmental Quality Control Council	35	Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping Awareness Training
11/19/15; 11/21/15	Davison Army Airfield (DAAF) – Fort Belvoir Fire and Emergency Services personnel	60	Facility ISWPPP Training and Illicit Discharge Training
12/1/15	DAAF – AFD, AAOG, AFS, DPW ENRD, RDECOM	17	Facility ISWPPP Training and Illicit Discharge Training
12/17/15	Wood Theater – DCNG, AMSA 91, NVESD, USASPO, CMRL, 12 th Aviation Delta, LRC, MWR, RDECOM, DERDCE, FBCH, ULA, HQDA	77	Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping/Spill Prevention & Reporting and Material Storage Awareness Training
1/6/16	Fort Belvoir Community Hospital (FBCH) – Environmental Compliance Officers	39	Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping/Spill Prevention & Reporting and Material Storage - Awareness Training
1/8/16	DAAF Facility ISWPPP Training: 911 th , CID, HCC Awareness Training: FBCH, 12 th Aviation, AA06, AMSA, CMLR, DC ARNG, DLA, DPW ENRD, LRC, MDA, MWR, NVESD, Safety Office, USASPO, ULA-HECSA	303	Facility ISWPPP Training and Illicit Discharge/Spill Prevention & Reporting Awareness Training
1/13/16	Fort Belvoir Community Hospital – Environmental Compliance Officers	7	Stormwater Pollution Prevention/Illicit Discharge/Spill Reporting Awareness Training
2/8/16	Landfill Cover Maintenance Project – Construction Personnel	6	Construction Site Stormwater Pollution Prevention/Erosion and Sediment Control Training

Table 7. Training Events Conducted			
Date	Audience	Number of Employees	Training objective(s):
2/12/16	DAAF/OSEG STF 350 Project – construction personnel	9	Construction Site Stormwater Pollution Prevention/Erosion and Sediment Control Training
3/3/16	IPO Trailer Removal Project – Construction Personnel	6	Construction Site Stormwater Pollution Prevention/Erosion and Sediment Control Training
3/15/16	ADF-E (Operations and Maintenance personnel)	5	Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping Training
3/17/16	Directorate of Public Works Civilian Employees	53	Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping Awareness Training
4/4/16	Building 1150/1151 Demolition Project – Construction Personnel	5	Construction Site Stormwater Pollution Prevention/Erosion and Sediment Control Training
4/26/16	INSCOM SAOF Phase II & III Project – Construction Personnel	9	Construction Site Stormwater Pollution Prevention/Erosion and Sediment Control Training
5/17/16 5/18/16	Personnel working around fuel tanks/oil storage areas	61	Oil Spill Response and Recovery Training
6/15/16	ALEUT – Operations and Maintenance Contracted Personnel	28	Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping/Spill Prevention and Reporting/Material Storage Training
6/23/16	NCE Recreational Facilities Project – Construction Personnel	4	Construction Site Stormwater Pollution Prevention/Erosion and Sediment Control Training

e. Status of compliance with permit conditions: : For the reporting period, July 1, 2015 – June 30, 2016, Fort Belvoir completed the following actions to maintain compliance with permit conditions:

- Development and implementation of daily operational procedures were reviewed and revised, as necessary;
- Draft Master SWPPP completed and under review and revision;

- Additional Nutrient Management Plans were completed and exceeded the permit requirement of 40% of identified acreage within 36 months of permit coverage to be covered by turf and landscape nutrient management plans;
 - Stormwater Pollution Prevention/Illicit Discharge/Good Housekeeping training was conducted;
 - Written training plan being incorporated into the draft SWPPP.
- f. BMP assessment:** BMPs 6.1, 6.2, 6.4 – 6.7 for the Pollution/Prevention/Good Housekeeping MCM continue to remain effective and meet permit requirements. BMP 6.3 Support Street Sweeping Activities is a BMP that was identified in the Chesapeake Bay TMDL Action plan to meet the Chesapeake Bay TMDL pollutant load reductions. Therefore, this BMP has been renamed "BMP CHESBAY.2 Conduct Street Sweeping Program" and incorporated into the MS4 Program Plan under the Chesapeake Bay TMDL Action Plan BMPs.
- g. Progress toward achieving measurable goal identified in the MS4 Program Plan**
Status of achieving the measurable goals identified in the MS4 Program Plan are as follows:
- BMP 6.1 Develop and Implement Written Training Plan:** The measurable goal to develop and implement a written training plan was met for the reporting period July 1, 2015 – June 30, 2016. A draft Master SWPPP that incorporates training requirements was completed and is under review and revision. The final SWPPP is scheduled to be completed by June 30, 2017.
- BMP 6.2 Support Recycling and HAZMAT Programs:** The measurable goal to provide relevant information to the public was met for the reporting period July 1, 2015 – June 30, 2016. Fort Belvoir's household hazardous waste (HHW) program is managed by a privatized family housing contractor (The Michaels Organization) that is responsible for the collection of HHW and proper disposal. DPW ENRD staff is currently reviewing the family housing household hazardous waste program to evaluate how to improve coordination between the housing contractor and the Fort Belvoir recycling center and to make the program more user-friendly for housing residents. A revision to the housing household hazardous waste standard operating procedure is underway.
- All industrial hazardous waste generated by garrison tenants (non-family housing residents) is removed utilizing services contracted by Defense Logistics Agency for proper disposal.

Recycling information was incorporated into “The Villages at Fort Belvoir Resident Responsibility Guide”. In addition, the Fort Belvoir Policy Memorandum #30, Fort Belvoir Qualified Recycling Program is published on the Fort Belvoir website.

A Stormwater pollution prevention/illicit discharge awareness training was given to 77 Hazardous Waste Handlers during their annual refresher training on December 17, 2015.

BMP 6.3 Support Street Sweeping Activities: The measurable goal to develop street sweeping operations and maintenance standards to evaluate the effectiveness of street sweeping activities was exceeded for the reporting period July 1, 2015 – June 30, 2016. Street sweeping and dust control requirements were implemented during construction to control dust and to ensure that roads are kept clear of sediment and debris in accordance with Virginia Erosion and Sediment Control Handbook standards and specifications and 9VAC25-840-40, Minimum Standard 17. Contractors were required to use mechanical street sweepers or workers with brooms and shovels to ensure dirt and debris are not tracked onto roadways. Contractors were required to use water trucks to suppress dust generated by construction activities.

The Fort Belvoir Operations and Maintenance contractor conducted monthly street sweeping to keep roads and parking lots clear of sediment and debris. During the reporting period 6,168,127 square yards (1274 acres) of roadway and 6,850,700 square yards (1415 acres) of parking lots were swept monthly.

BMP 6.4 Maintain Spill Response Vehicle/Trailer: The measurable goal to maintain a minimum of one spill response trailer and ensure appropriate training of spill response staff was met for the reporting period July 1, 2015 – June 30, 2016. Fort Belvoir has a current Spill Response Plan that is published on the Fort Belvoir website at <http://www.belvoir.army.mil/environdocs.asp>. A spill response Conex Box was maintained at Building 1495, a spill response cabinet was maintained at the Davison Army Airfield (Building 316), the base operations and maintenance contractor maintained spill-related supplies at Buildings 114 and 1419 and a decontamination trailer was maintained at the North Post Fire Station (Building 2119).

DPW ENRD also updated spill response information and posted placards in strategic locations which provide information on what to do in case of a spill. The Fort Belvoir Hazardous Waste Minimization and Management Plan requires that spill response

procedures and spill kits be posted/located within 50 feet of satellite accumulation areas.

Oil Spill Response and Recovery Training classes were conducted on May 17, 2016, May 18, 2016 and July 13, 2016 with 75 attendees.

BMP 6.5 Support “Self Help” Programs: The measurable goal to incorporate information about these programs into stormwater pamphlets and include information about “Self Help” programs on the Fort Belvoir website was met for the reporting period July 1, 2015 – June 30, 2016. The brochure titled “*Don’t Dump Here...It Ends Up Here!*” that was revised and printed during the 2014-2015 reporting period was distributed to a variety of audiences during this reporting period.

For the Automotive “Self Help” program, a facility inspection was conducted on January 6, 2016 for the Automotive Skills Center, Building 1462 to evaluate potential sources of stormwater pollution. Potential stormwater pollutant sources were identified and it was determined that this facility needed to be included in the Master SWPPP that is under development.

BMP 6.6 Develop and Implement Nutrient Management Programs: The measurable goal to have 40% of all identified managed turf acres covered by nutrient management plans was exceeded for the reporting period July 1, 2015 – June 30, 2016. Fort Belvoir identified 382 acres of managed turf that is required to be addressed by nutrient management plans. Fort Belvoir developed a nutrient management plan for the golf course (119 acres), eleven (115 acres) of the fifteen housing neighborhoods and the Missile Defense Agency (6 acres). To date, 63% (240/382) of the total managed turf is covered by nutrient management plans. Future development of the additional plans for managed turf within the remaining four housing areas, Defense Logistics Agency and Fort Belvoir North Area is planned during the next permit year.

BMP 6.7 Develop and Implement Stormwater Pollution Prevention Plans: The measurable goal to develop and implement SWPPPs for all high-priority facilities identified was met for the reporting period July 1, 2015 – June 30, 2016. A draft Master SWPPP was completed and is under review. The Final SWPPP is scheduled to be completed by June 30, 2017.

- C. Results of the information collected and analyzed, including monitoring data, if any, during the reporting period:** As part of the permit application process for the new VPDES Industrial Stormwater Major Permit (VA0092771), Fort Belvoir is completing sampling and analysis for 32 outfall locations throughout the installation. The permit application with sampling data for 21 outfalls was submitted to VADEQ, Northern Regional Office in Woodbridge, Virginia on June 3, 2013 (revised). While working with VADEQ, it was determined that additional locations should be covered under the permit and additional outfalls were added to the permit application. Each location is being analyzed for the constituents listed in EPA Form 3510-2F, Table 2F-1, 2F-2, 2F-3 and 2F-4. The sampling for the remaining eleven outfalls is still underway and the analysis is available upon request. Also as part of the permitting process, until the VPDES Permit VA0092771 is issued, the installation is sampling before final permit issuance to complete benchmark monitoring ahead of the required dates. During this permit reporting period, nine stormwater outfalls sampling events were monitored across the installation for: total nitrogen, total phosphorous, total suspended solids, and total petroleum hydrocarbon. To include sampling for Chesapeake Bay TMDL monitoring. However, six of the stormwater outfall sampling events were not covered under an active VPDES industrial stormwater permit. This sampling data is available upon request.

As part of the sampling and investigation under the Fort Belvoir PCB TMDL Action Plan, sampling of the stormwater for PCBs in the vicinity of Building 1495 was conducted in November 2013 with the sample results received December 2013. PCBs were detected at Outfall SW 001 at 4,470 pg/L and at Outfall SW 003 at 910 pg/L. Sampling was also conducted during the 2014-2015 reporting period on April 30, 2015. PCBs were detected at Outfall SW 001 at 93,100 pg/L and at Outfall SW 003 at 12,300 pg/L. During this reporting period, sampling was conducted on September 29, 2015. PCBs were detected at Outfall SW 001 at 328 pg/L and at Outfall SW 003 at 1,680 pg/L. Fort Belvoir has submitted a project requesting funding under the Army Environmental Restoration Program to perform a Resource Conservation and Recovery Act (RCRA) Facility Investigation at this site in accordance with Fort Belvoir's RCRA Hazardous Waste Permit VA7213720082 Module IV. Contract was expected to be awarded in May 2016, but the award has been delayed at the contracting office. Contract is now expected to be awarded by December 2016.

- D. A summary of the stormwater activities the operator plans to undertake during the next reporting cycle;** Stormwater activities to be undertaken during the next reporting cycle are located in Section 9 of the MS4 Program Plan that was revised in September 2016.

E. A change in any identified best management practices or measurable goals for any of the minimum control measure including steps to be taken to address any deficiencies; The following changes have been made in the MS4 Program Plan:

- MCM#1: No changes;
- MCM#2: No changes;
- MCM#3: BMP 3.6 will be incorporated into the Master SWPPP that will be completed by June 30, 2017 and no longer needs to be individually noted in the MS4 Program Plan. BMP 3.7 Implement Fort Belvoir Pollution Complaint “Hot Line” will be incorporated into the *U.S. Army, Fort Belvoir, Virginia Public Education and Outreach Plan, June 2015* that is currently under review and scheduled to be completed in December 2016 and no longer needs to be individually noted in the MS4 Program Plan.
- MCM#4: BMP 4.7 Progressive Compliance Enforcement Strategy was amended to include telephone notification to VADEQ Northern Regional Office when a contractor fails to obtain a Construction General Permit and/or an approved stormwater management and/or erosion and sediment control plan from VADEQ prior to start of construction.
- MCM#5: No changes.
- MCM#6: BMP 6.3 has been renamed "BMP CHESBAY.2 Conduct Street Sweeping Program" and incorporated into the MS4 Program Plan under the Chesapeake Bay TMDL Action Plan BMPs.

F. Notice that the operator is relying on another government entity to satisfy some of the state permit obligations (if applicable): Not applicable.

G. The approval status of any programs pursuant to Section II.C of the general permit (if appropriate), or the progress towards achieving full approval of these programs: Not applicable.

H. Information required for any applicable TMDL special condition obtained in Section I of the general permit.

1. Polychlorinated Biphenyls (PCBs) TMDL

A PCBs TMDL Schedule for Implementation was provided to Virginia Department of Conservation and Recreation (VADCR) in a letter dated May 30, 2012. The Final Fort Belvoir PCB TMDL Action Plan was completed in March 2013. This plan was accepted on December 16, 2015 by Virginia Department of Environmental Quality (VADEQ) and will be revised by December 2016 to incorporate the two comments provided by VADEQ. The

TMDL Action Plan includes documentation for actions that were listed in *Table 3. PCB TMDL Schedule for Implementation, MS4 Program Plan Revised September 2015* that have been annotated as completed. Because information in this table was incorporated into the PCB TMDL Action Plan, the only action listed in the table that has not been completed is characterization of runoff by sampling. Sampling progress is required to be reported in the MS4 annual report, therefore, Table 3 is redundant and has been deleted from the MS4 program plan.

The PCB TMDL Action plan also recommended BMPs that can be addressed under the MS4 permit to minimize discharge of PCBs as well as a sampling plan for outfalls that were identified in the ORI to characterize annual runoff. The complete PCB TMDL Action Plan is incorporated into the MS4 Program Plan by reference and is available upon request.

An assessment of the appropriateness of the best management practices that were identified in the PCB TMDL Action Plan and progress towards achieving the identified measurable goals are provided below.

BMP PCB.1 Develop Information Sheet on PCBs: The measurable goal to develop an information sheet and make it available at Accotink Bay Wildlife Refuge Education Center, Fort Belvoir website, family housing resident guidelines, and other training avenues, as needed was not met for the reporting period July 1, 2015 – June 30, 2016. The information sheet will be developed in permit year 4.

BMP PCB.2 Maintain a GIS Layer: The measurable goal to annually update and maintain a GIS data layer that includes the locations of past and present PCB sites was met for the reporting period July 1, 2015 – June 30, 2016. All known PCB sites are mapped with GIS.

BMP PCB.3 Develop and Implement PCB Sampling Plan: The measurable goal to implement the sampling plan was met for the reporting period July 1, 2015 – June 30, 2016. The sampling plan was developed as part of the *Virginia Pollutant Discharge Elimination System MS4 Permit, Fort Belvoir PCB TMDL Action Plan* prepared by Tidewater, Inc. dated March 2013. Sampling in accordance with this plan was conducted in September 2015.

BMP PCB.4 Incorporate PCB information into “BMP 6.1 Develop and Implement Written Training Plan”: The measurable goal to implement the training plan was not met for the reporting period July 1, 2015 – June 30, 2016. The power point slides specifically addressing PCB historic use and possible PCB leaks was inadvertently deleted from the Power Point presentation when a change in training staff occurred. The slides will be re-inserted into

the training program at the beginning of permit year 4 for use during the 2016-2017 reporting period.

Additionally, training appears to be effective in the past for DPW employees because during the reporting period, DPW, Natural Resources Branch personnel notified the MS4 program manager that they had located two old transformers still on the pole in the training area off of Poe Road. These transformers were removed by Dominion Virginia Power on October 5, 2015 and confirmed that these were PCB transformers. Additionally a total of six transformers were removed near the corner of Theote and Pohick road on March 23, 2016 and three out of six transformers were confirmed to contain PCBs. Dominion Virginia Power transported the PCB transformers to their Richmond facility for proper disposal.

2. Bacteria TMDL – Accotink Creek

The Bacteria TMDL for the Lower Accotink Creek Watershed was issued in September 2008. The *General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, Permit #VAR040093* issued on July 1, 2013 requires that “TMDL Action Plans for applicable TMDLs approved between July 2008 and June 2013” be updated by 36 months after permit coverage. A Fort Belvoir Bacteria TMDL Action Plan was developed and is being submitted on September 30, 2016 for VADEQ review and approval. The MS4 Program Plan will be updated to incorporate proposed BMPs once VADEQ approval is received.

3. Chesapeake Bay TMDL for Nitrogen, Phosphorous and Sediment

Fort Belvoir submitted “*Chesapeake Bay Total Maximum Daily Load (TMDL) Study for Fort Belvoir*” dated July 2015 to VADEQ on September 30, 2015 in accordance with Section I.B of the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). Additional information was provided on January 8, 2016, March 14, 2016 and March 18, 2016. The document was revised to incorporate comments from VADEQ on March 17, 2016. VADEQ provided written approval of the document on March 22, 2016.

The TMDL Action Plan concluded that approximately 30,600 pounds of Total Nitrogen (TN), 2,200 pounds of Total Phosphorous (TP) and 1.45 million pounds of Total Suspended Solids (TSS) are loaded into the waterways from Fort Belvoir annually, based on 2009 land use data. Fort Belvoir must reduce nutrient loads by approximately 2,500 pounds of TN, 236 pounds of TP and 265,800 pounds of TSS by the end of the third MS4 permit cycle. Fort Belvoir met pollutant load reductions by street sweeping, stream and shoreline restoration and land use change Best Management Practices (BMPs). Implementation of the TMDL

Action Plan will result in the following annual reduction of pollutants of concern in the Potomac River Basin:

Pollutant of Concern	Annual Load Reduction (lb/yr)	Percentage of L2 Reduction Achieved After Implementation
Total Nitrogen	2,664.79	109%
Total Phosphorous	681.53	289%
Total Suspended Solids	969,828	365%

The completed/implemented projects far exceed the L2 reduction requirements for TN, TP and TSS. Therefore, no additional BMPs were necessary to meet pollution load reduction goals. Stream and shoreline restoration and land use change Best Management Practices were completed. The only BMP that is required to be conducted annually to maintain the annual load reduction credit is the street sweeping BMP.

During this reporting period, the Fort Belvoir Operations and Maintenance contractor reported street sweeping of 6,168,127 square yards (1275 acres) of roadway and 6,850,700 square yards (1415 acres) of parking lots monthly. This exceeded the goal identified in the Chesapeake Bay TMDL Action Plan of sweeping 2,686 acres per year.

- I. **Signed certification statement:** See Section A.5. located in this report for the signed certification statement. A new delegation of signature authority memorandum was signed by the new Garrison Commander on August 12, 2016 and is provided at Appendix C.

**APPENDIX A.
SUMMARY OF SUSPECTED ILLICIT DISCHARGE
INVESTIGATIONS**

Illicit Discharge Investigation Summary

July 1, 2015 – June 30, 2016

**Table 1: Summary of Illicit Discharge Investigations
July 1, 2015 – June 30, 2016**

Fort Belvoir Incident Number	Date Discovered	Associated MS4 Structure ID	Description	Status	Discovery Method
15-002	10/29/14	509	See MS4 Annual Report Section 3.b.	Open	ORI
15-003	10/30/14	2796	See MS4 Annual Report Section 3.b.	Open	ORI
15-004	10/30/14	6244	See MS4 Annual Report Section 3.b.	Open	ORI
15-006	2/4/15	2723	DPW Remediation Project Manager reported that there was inquiry from VADEQ about outfalls located near Tully gate. Outfall observed to be flowing. After upgrade of Sanitary Lift Station 1409, outfall flow had decreased significantly. This outfall placed on ORI list for continued monitoring. The most recent monitoring of the site (9/8/15) showed no flow from the outfalls. Awaiting funding to conduct remote camera inspection of pipes to determine if the low flow is groundwater.	Open	DPW ENRD Reported
15-012	4/3/15	Sheet flow to Un-named Tributary to Gunston Cove.	DPW employee discovered eye wash station drain in Building 367 routed to storm sewer. Drain needs to be re-routed to sanitary sewer. Work request submitted on April 3, 2015.	Open	DPW O&M Division Reported
16-01	9/10/15	N/A	SSO behind Building 2305 Suntrust Bank. This was not considered an illicit discharge into the MS4 because it discharged across land into an unnamed ditch leading to a tributary to Mason Run.	Closed	DPW O&M Division Reported

**Table 1: Summary of Illicit Discharge Investigations
July 1, 2015 – June 30, 2016**

Fort Belvoir Incident Number	Date Discovered	Associated MS4 Structure ID	Description	Status	Discovery Method
16-02	9/11/15	3469	Ten gallons of cooking oil released from a garbage truck to the parking lot of Bldg 2305 when the trash compactor compacted the load. Fire department responded and used soap and water to remove the cooking oil from pavement. Approximately one gallon of oil and water entered a nearby storm drain. DPW ENRD advised fire department that soap was not allowed to be used and the fire company used pads and booms to prevent any further discharge to the storm drain.	Closed	Spill Response Program Manager Notified by Fire Department
16-03	9/21/15	520	Moderate flow with elevated Fluoride levels; suspected source is potable water. Reported to American Water COR on 9/23/15; AW investigated, no potable water source found. Re-screen in 2016/2017 ORI.	Open	ORI
16-04	11/20/15	6282	One gallon of a medical disinfectant (Rapticide B) poured down the storm drain behind Fort Belvoir Community Hospital. Report was received 3 days post incident. Stormwater Pollution Prevention/Illicit discharge training provided to Fort Belvoir Compliance Officers on January 6, 2016.	Closed	ENRD Spill Response Manager Notified via email.
16-05	11/23/15	969	See MS4 Annual Report Section 3.b. Provide training to Holiday Inn Express hotel staff in 2016/2017 and analyze feasibility of putting storm drain markers on the inlet noted during the ORI investigation. Re-screen in 2016/2017 ORI.	Open	ORI
16-06	11/23/15	984	See MS4 Annual Report Section 3.b. Re-screen in 2016/2017 ORI to verify that the discharge has been eliminated.	Open	ORI
16-07	11/23/15	2924	See MS4 Annual Report Section 3.b. Rescreen in 2016/2107 ORI. Suspected source is natural decomposition upstream of outfall.	Open	ORI
16-08	11/23/15	3950	See MS4 Annual Report Section 3.b. No flow present on April 14, 2016. Rescreen in 2016/2107 ORI.	Open	ORI

**Table 1: Summary of Illicit Discharge Investigations
July 1, 2015 – June 30, 2016**

Fort Belvoir Incident Number	Date Discovered	Associated MS4 Structure ID	Description	Status	Discovery Method
16-09	11/23/15	4470	See MS4 Annual Report Section 3.b. Rescreen in 2016/2107 ORI. Suspected source is sump pumps from residential homes.	Open	ORI
16-10	11/24/15	1715	See MS4 Annual Report Section 3.b. Rescreen in 2016/2107 ORI. Suspected source is potable water leak.	Open	ORI
16-11	11/30/15	6206	Fuel spill of as much as 250 gallons occurred at the National Geospatial Intelligence Agency (NGA). Spill response conducted. Pollution Complaint # 2016-3106.	Closed	Jogger reported fuel odor to NGA police. Fire Department notified ENRD
16-12	12/5/15	N/A	SSO west side of Gunston Road north of Gorgas Road near storm culvert. This was not considered an illicit discharge into the MS4 because it directly discharged into a ditch that flows to Mason Run.	Closed	AW reported to DPW O&M
16-13	2/16/16	1931	Leaking transformer outside of Building 383. Transformer fluid entered a stormwater drainage ditch that leads to the Potomac. Booms and pads set up in the drainage ditch downgradient of transformer. Vac truck pumped out contaminated water in the drainage ditch.	Closed	Area 300 personnel reported to Dominion Virginia Power.
16-14	3/2/16	N/A	SSO with direct discharge to an un-named tributary of Dogue Creek, not the MS4.	Closed	AW reported to DPW O&M
16-15	3/9/16	4416	Complaint received and followed up on windshield inspection. Bldg 2444 had permanent contractor storage area with sediment and improper salt storage. This site has been placed on an annual inspection cycle.	Closed	DPW ENRD Field Staff Reported

**Table 1: Summary of Illicit Discharge Investigations
July 1, 2015 – June 30, 2016**

Fort Belvoir Incident Number	Date Discovered	Associated MS4 Structure ID	Description	Status	Discovery Method
16-16	4/5/16	Downstream of 2058	Oily sheen in small pool of water on side of stream near outfall at Tulley gate. Source unknown, may be runoff from road or parking lot to the north. Absorbent pads placed on sheen overnight.	Closed	DPW EMRD Field Staff Reported
16-17	4/13/16	3931 3932	Complaint received that American Water was draining water tank for decommissioning to a curb inlet which leads to un-named tributary of Dogue Creek. AW Staff educated on what needs to be done.	Closed	DPW Staff Field Reported
16-18	4/28/16	No assigned MS4 Structure ID	Leaking vehicle at South Post Burger King. Oil cleaned up. Added the curb inlet to the list of MS4 structures that need to be assigned Structure ID#s.	Closed	DPW Field Staff Reported
16-19	5/23/16	N/A	SSO reported near Dogue Creek Village. This was not considered an illicit discharge into the MS4 because it discharged directly to surface water.	Closed	AW reported to DPW O&M
16-20	6/6/16	2955	SSO from manhole across from Bldg 1416 on Jackson Loop into MS4. Blockage cleared.	Closed	AW reported
16-21	6/30/16	No assigned MS4 Structure ID	SSO at Burger King at corner of Gunston and Pohick Road caused by un-serviced grease trap. Added the curb inlet to the list of MS4 structures that need to be assigned Structure ID#s.	Closed	O&M Contractor Reported to AW

**Table 2. Facility Investigations for Illicit Discharges
July 1, 2015 – June 30, 2016**

Date	Facility Location	Deficiency	Corrective Action
9/22/15	Building 1114	Improper material storage (salt, asphalt patch), leaking oil from several trucks,	Base O&M Contractor notified and had corrected improper storage of asphalt patch and cleaned up leaking truck by 9/23/16 re-inspection. Work order was put in to get the leaking roof of the salt dome repaired.
9/22/15	Building 3232	Contractor storage area near Building 3232 had improper material storage of concrete bags, batteries and other materials.	Contractor was notified and deficiencies were corrected by 9/23/16 re-inspection.
9/22/15	Dogue Creek Marina	Improper material storage of used fuel and oil drums on bare soil, poor general housekeeping (fuel staining, paint staining, scrap metal, general trash), Boat maintenance activities (Painting, scraping/sanding, mechanical maintenance) being conducted outside	Director of Family and Morale, Welfare and Recreation was issued a letter signed by the Garrison Commander on October 8, 2015. Stormwater findings completed by October 30, 2015.
9/23/15	Meade Road Contractor Laydown/Storage Area	Spill from portable welding unit was discovered during Army Headquarters audit.	Contractor cleaned up spill by 9/24/16

**Table 2. Facility Investigations for Illicit Discharges
July 1, 2015 – June 30, 2016**

Date	Facility Location	Deficiency	Corrective Action
9/23/15	Building 1124, DOL Fuel Point	Dispenser hose from a fitting was leaking fuel.	DOL Fuel notified and hose was fixed.
9/24/16	Building 1906	No deficiencies noted.	None Needed.
9/24/16	Building 1950	No deficiencies noted.	None Needed.
1/6/16	Building 1462	Waste metal being stored outside on ground, in an open trailer.	Cover with tarp to prevent metal from coming into contact with stormwater. Empty trailer as soon as it is full, do not let scrap overflow onto ground. Waste contract COR was notified and provided larger open trailer and educated staff about putting a tarp over it at the end of each day, and especially when it is raining.

APPENDIX B.
NEW STORMWATER MANAGEMENT FACILITIES

APPENDIX C.
DELEGATION OF SIGNATURE AUTHORITY MEMORANDUM



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BELVOIR
9820 FLAGLER ROAD, SUITE 213
FORT BELVOIR, VIRGINIA 22060-5928

REPLY TO
ATTENTION OF

IMBV-PW

12 August 2016

MEMORANDUM FOR Mr. Bill Sanders, Director of Public Works, 9430 Jackson Loop, Fort Belvoir, VA 22060-5116

SUBJECT: Delegation of Signature Authority, Clean Water Act Storm Water Management Program, Municipal Separate Storm Sewer System (MS4) Correspondence

1. You are authorized to sign all routine correspondence related to the Installation's MS4 permit, effective upon submission of this delegation memorandum to the Virginia Department of Environmental Quality as required by 9VAC25-870-370.B.3.
2. Fort Belvoir's Storm Water Management (MS4) program is performed in accordance with the Clean Water Act (33 USC Sec. 1251 et seq.), Virginia Storm Water Management Act (Va. Code Secs. 62.1-44.15:24 et seq.), and Virginia Storm Water Management Regulations (9VAC25-890-1 et seq.).
3. Routine correspondence includes:
 - a. Correspondence related to and including submittal of annual reports for the General Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4 Permit).
 - b. Correspondence related to Requests for Information received from the Commonwealth of Virginia, Department of Environmental Quality.
4. Signatory authority for submittal of MS4 Permit registration statement remains with the Garrison Commander.
5. Submittal of routine correspondence described in 3.a. or b. shall include certification of reports or other information required under 9VAC25-890-30 and 9VAC25-870-370.B.
6. This delegation may be withdrawn at any time. Notice of withdrawal must be provided to the Virginia Department of Environmental Quality.
7. This delegation shall expire upon change of command or change of Director of Public Works.
8. Authority: AR 25-50 (Preparing and Managing Correspondence), paragraph 6-1.

ANGIE K. HOLBROOK
Colonel, AG
Commanding

“LEADERS IN EXCELLENCE”