AECOM

U.S. Army Garrison
Fort Belvoir, Virginia

ANNUAL REPORT
1 JULY 2023 – 30 JUNE 2024

General VPDES Permit for Discharges of Stormwater from Municipal Separate Storm Sewer Systems

Permit VAR040093

27 August 2024

Delivering a better world

Quality Information

Prepared by	Checked by	Verified by	Approved by
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1 JULY 2023 – 30 JUNE 2024

Information provided in this annual report is provided as specified in the MS4 General Permit codified in 9VAC25-890-40 and effective 1 November 2023. Additionally, Virginia Department of Environmental Quality (VADEQ) provided an MS4 Annual Report Submittals – Minimum Requirements via email on 2 August 2019.

1. BACKGROUND INFORMATION (PART I.D.2)

a. Name and permit number of the permitted facility submitting the annual report:

US Army, Fort Belvoir, VA MS4 Permit Number: VAR040093

b. Annual Report Year:

1 July 2023 – 30 June 2024

c. Modifications to any operator's department's roles and responsibilities:

The Director of Public Works, Mr. Yun Heo took over responsibilities from the former interim Director, Mr. Matthew Bracket, and former Director, Mr. Micah Boersma on 2 January 2024 and has been present for the remainder of the reporting period since taking the position of Director. A delegation of signature authority is provided in Appendix A.

The MS4 Program Manager, Ms. Ashley C. McMahon, was in place as the acting MS4 Program Manager during the reporting period and can be reached at 703-806-0627. The former Stormwater Facility Maintenance Liaison, Ms. Calli Kaufhold, left in March 2024 and has been temporarily covered by Ms. Ashley C. McMahon since March 2024.

d. Number of new MS4 outfalls and associated acreage by HUC added during the permit year:

There were no new MS4 outfalls brought online during the reporting period 1 July 2023 – 30 June 2024. Appendix B contains pertinent data for all new structures.

e. 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."

HEO.YUN.1055893400 Digitally signed by HEO.YUN.1055893400
Date: 2024.09.24 09:50:53 -04'00'

Director, Public Works Date

VAR040093 Fort Belvoir
MS4 Permit Number MS4 Name

2. MINIMUM CONTROL MEASURE IMPLEMENTATION (PART I.E)

A. MCM#1 – PUBLIC EDUCATION AND OUTREACH

I. PART I.E.1.G. (1) THROUGH (4)

Provide a list of the high-priority stormwater issues addressed in the public education and outreach plan, a summary of activities conducted and strategies used to communicate each high-priority stormwater issue, a description of any changes in high-priority stormwater issues and rationale, and a description of public education and outreach activities conducted that included education regarding climate change.

Fort Belvoir chose to implement three (3) strategies listed in Table 1 of the MS4 General Permit including: traditional written materials, media materials, and speaking engagements. These strategies were used to educate the public on key water quality issues applicable to Fort Belvoir with a focus on those associated with Total Maximum Daily Loads (TMDLs), to include bacteria, nutrients, sediment, chloride, and FOG (fats, oils, and greases). Table 1 below summarizes activities conducted and the associated data for the reporting period. Supporting documentation (articles, newsletters, brochures, etc.) are available upon request.

Table 1: Education and Outreach Activities (1 July 2023 – 30 June 2024)

Traditional Written Materials				
Articles Published via The Housing Group Mass Notification System and/or Housing Facebook posts Articles and Guides distributed to the Housing Communities across Fort Belvoir Total Number of Residences = 2,143[1] Total Population = 7,637[2]				
Date	**Issue**	**Audience**	**Title**	**Topic**
29 September 2023	Nutrients and Sediment	Email: 2,800[3] Facebook: N/A[3]	*Fall Foliage and Nutrient Related Stormwater Challenges*	How fall foliage can impact stormwater and best fall yard management practices
4 October 2023	Nutrient Loading	Email: 2,800[3] Facebook: N/A[3]	*Helping to Prevent Algae Blooms in our Lakes and Streams*	How to carefully apply lawn fertilizer which can help prevent algae blooms in lakes and streams
19 December 2023	Chloride	Email: 2,800[3] Facebook: N/A[3]	*Winter Weather and Watershed Health*	Impacts of snow removal and chloride on stormwater and tips for how to manage snow and ice
19 April 2024	Nutrients and Sediment	Email: 2,800[3] Facebook: N/A[3]	*Spring into Stormwater-Friendly Lawn Care*	Impacts of fertilizer on stormwater and how best to manage springtime yard and garden maintenance
27 June 2024	Bacteria	Email: 2,800[3] Facebook: N/A[3]	*Scoop Your Pet Poop: Protect Our Water and Community*	How pet waste contributes to pollution and tips to help
Newsletters and Brochures DPW Newsletter distributed to High-Priority Facility Personnel via email[4] and posted on Facebook[6] for the public. Brochures are posted at key locations to reach audiences where topics are applicable.				
Email: 25 Sep 2023 Facebook: 27 Sep 2023	Illicit Discharges	Email: 89[4] Facebook: 148[6]	Fall Stormwater Newsletter	How to recognize, respond, report, and record spills and illicit discharges

Email: 22 Dec 2023 Facebook: N/A	Illicit Discharges	Email: 85[4] Facebook: N/A[6]	Winter Stormwater Newsletter	Proper use and storage of chloride-containing deicing materials and minimizing and eliminating exposure
Email: 26 Mar 2024 Facebook: N/A	Nutrients and Sediment	Email: 89[4] Facebook: N/A[6]	Spring Stormwater Newsletter	Outdoor material storage, proper fertilizer timing and application, and reduction of runoff and minimizing exposure during the rainy season
Email: 24 Jun 2024 Facebook: N/A	Bacteria	Email: 91[4] Facebook: N/A[6]	Summer Stormwater Newsletter	Proper car washing methods including using the proper materials, where to conduct car washing operations, and how to use specific controls to prevent illicit discharges
Ongoing	PCBs	Posted at Hunting/Hiking kiosks and on the iSportsman website: 42[5]	PCB Awareness for Hikers and Hunters	Brochure: *"The Dangers of PCBs and How You Can Help"*
Media Materials: Facebook Posts on @FortBelvoirEnvironmental Each post is monitored individually for the audience reached, please see Appendix C.				
1 Jul 2023 through 30 Jun 2024	Various	~12 posts, average of 164 viewers[6]	*Various*	A wide variety of stormwater topics
Speaking Engagements: Presentations Interactive Displays and Stormwater Awareness Brochures distributed at events.				
Date	**Issue**	**Audience**	**Event**	**Materials Displayed**
25 October 2023	Illicit Discharges and Illegal Dumping	74 Belvoir tenant representatives in attendance, including Garrison Commander	Environmental Quality Control Committee (EQCC) Meeting	A prepared PowerPoint presentation on illicit discharges and illegal dumping was displayed for all attendees
3 November 2023	General Stormwater Management	None[7]	Stormwater Walk	Classroom watershed/stormwater modeling display, interpretive walk to identify stormwater infrastructure and flow paths, and installed "No Dumping" placards on several curb inlets.
22 Apr 2024	Sediment, Detergent, Grease, Litter, Fertilizer (Nutrients), PCBs	21 Belvoir residents in attendance Five (5) of each Brochure distributed	Earth Day	Displays: - *Common Stormwater Pollutants* - *Litter & Plastic Pollution's Effect on Water Quality* - *Stormwater Pollution Prevention Diorama* - *What is Erosion?* Brochures: - *Now We Know Better* - *Protect Our Local Waterways* - *10 Things You Can Do to Save the Bay* - *Only Rain Down the Drain* - *The Dangers of PCBs and How You Can Help* Children's Activity Books
16 May 2024	FOG, Detergents, Bacteria,	2,500[8] Soldiers and Civilians and 75	Safety and Wellness Day	Displays: - *Only Rain Down the Drain*

	Fertilizer (Nutrients), PCBs	Tenant Representatives in attendance 150 Booth Visitors 125 Brochures distributed		*- Pollution Jars* Brochures: *- Illicit Discharge Detection and Elimination* *- Protect Our Local Waterways*
[1]Number of Residences: Email from Community Director from The Michaels Organization (TMO), Jennifer Watkins, dated 22 July 2024. [2]U.S. Census Bureau 2020 Population data. [3]Email from Community Director of TMO, Jennifer Watkins, dated 22 July 2024 including email and Facebook distribution data. [4]Distribution list/delivery from Industrial Stormwater Program Manager, Ashley C. McMahon. [5]833 people applied for fishing permits and had the chance to interact with the posted PCB Brochure on the iSportsman website: E-mail from Wildlife Scientist, Kevin Walter dated 22 July 2024. Unable to determine actual number of people who opened link to PCB brochure; assumes 5% of people who applied for fishing license through website opened link. This number may be elevated from actual.			[6]Facebook Interaction Report, shown in Appendix C. Note there was a large drop in Facebook posts due to a lack of staff dedicated to running the Facebook page. [7]Attendance at the Stormwater Walk was impacted by late advertising by collaborating organization and change in early school dismissal schedule. [8]Phone conversation on 22 July 2024, between DPW ENV Contractor Daniel Schlobach and Shanice Smith from the Safety Office.	

A list of education and outreach opportunities that may be employed during the next reporting period (1 July 2024 – 30 June 2025) may be found in the most recent MS4 Program Plan.

II. REVIEW OF MCM#1 PROGRAM EFFECTIVENESS:

For the reporting period, 1 July 2023 – 30 June 2024, Fort Belvoir completed the following actions to maintain compliance with permit conditions of the MS4 General Permit that became effective on 1 November 2023:

- Belvoir employed three (3) strategies from Table 1 of the MS4 General Permit to reach varied audiences. Various topics were addressed including the five (5) priority issues identified in the Program Plan.
- Fort Belvoir continued to develop effective avenues for reaching the residents of Fort Belvoir by using the mass email notification system that was used during the last reporting cycles.
    - Four (4) articles were distributed via One Call Now, the mass email notification system used by the housing group. Articles cover seasonally topical pollution prevention techniques and promote the use of best management practices to housing residents.
- No changes were made in the high-priority stormwater issues or strategies used for communication during this reporting period.
- Department of Public Works (DPW) Environmental continued to publish the quarterly newsletter, which was distributed via email to High Priority Facility personnel and via Facebook to the public.
    - The winter, spring, and summer stormwater newsletters were not posted to the DPW Environmental Division Facebook page. This was due to revised posting procedures, where DPW has to now go through the Public Affairs Office (PAO) to post items to the DPW Environmental Division Facebook page which has caused delays in postings or items never being posted at all. DPW Environmental is working towards a solution.
- DPW Environmental maintained avenues to ensure a wide distribution of educational materials through the dedicated @FortBelvoirEnvironmental Facebook page. DPW Environmental also maintained control over the home page which assisted in better control of posting information and plans, although all edits are routed through the PAO prior to publishing.
- The in-person speaking events included an EQCC Meeting, Earth Day, and Safety and Wellness Day.

  - EQCC Meeting – Illicit Discharge and Illegal Dumping was held in-person on 25 October 2023. In attendance were 75 tenant representatives as well as the Garrison Commander; to learn about common illicit discharge and illegal dumping occurrences and how to avoid them, authorized and unauthorized non-stormwater discharges, and how to report incidents to the Environmental Division.
  - An Earth Day Celebration was held in-person on 22 April 2024. A total of 21 residents attended the event and learned about the need to reduce sediment in stormwater, common pollutant sources, and plastic and litter impact our environment through brochures and interactive displays.
  - The PAO held Safety and Wellness Day on 16 May 2024, with approximately 2,500 soldiers and civilians and 75 tenant representatives in attendance. Fort Belvoir Environmental Division educated participants using brochures and interactive displays, including the popular stormwater pollutant jars and stormwater trivia questions. Personnel communicated pollution prevention tactics to participants, shared online resources, and provided points of contact for stormwater related questions and concerns.

- The Earth Day event conducted on 22 April 2024 and Safety and Wellness Day event conducted on 16 May 2024 discussed the effects of climate change on stormwater quality and quantity, and what residents can do to continue to keep our waterways clean.

Best Management Practice (BMP) 1.1 for the Public Education and Outreach MCM continues to remain effective and utilizes various communication media (Email mass notification, Housing Facebook pages, newsletters, brochure distribution to targeted audiences, Environmental Division Facebook page, speaking engagements) available within the Fort Belvoir organization. The inherent flexibility of the plan provides for many opportunities to reach the public without being so prescriptive as to limit growth and innovation in how the program is run. How Fort Belvoir achieved compliance with the measurable goals for MCM #1 based on the Program Plan is discussed below.

BMP 1.1 IMPLEMENT A PUBLIC EDUCATION AND OUTREACH PLAN:

The Education and Outreach Plan, contained within the Program Plan, is designed to increase public's knowledge on how to reduce stormwater pollution and the hazards associated with illegal discharges and improper disposal of wastes, including pertinent legal implications. The Plan places priority on reducing impacts to impaired waters and other local water pollution concerns for the areas surrounding Fort Belvoir with the five main stormwater issues being those associated with local TMDLs, including bacteria, nutrients, sediment, chloride, and FOG (fats, oils, and greases). The Plan calls for the implementation of a diverse program with a variety of strategies that can be targeted toward individuals or groups most likely to have significant stormwater impacts.

The plan outlines multiple strategies that will achieve the conditions listed in Permit Part I.E.1.b, c, and d, and how materials developed will:

1. Clearly identify the high priority stormwater issues (noted above).
2. Explain the importance of the high-priority stormwater issue.
3. Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues.
4. Provide a contact and telephone number, website, or location where the public can find out more information.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to annually review and revise the Education and Outreach Plan, as needed, was met.

- The Public Education and Outreach Plan was reviewed during the 2023-2024 reporting period, and found it adequately met all goals and remained effective. No updates were made for this reporting period.

The measurable goal to annually utilize two or more of the public education and outreach strategies that meet Permit Part I.E.1.b, c, and d to communicate to the public the high priority stormwater issues identified and how to reduce stormwater pollution was partially met.

- Belvoir employed at least three (3) strategies from Table 1 of the MS4 General Permit to reach varied audiences. Various topics were addressed including the five (5) priority issues identified in the Program Plan: bacteria, nutrients, sediment, chloride, and FOG (fats, oils, and greases) as well as polychlorinated biphenyls (PCBs), littering, and detergent use.
- The Facebook page, @FortBelvoirEnvironmental, was used about twelve (12) times during this reporting period to address pollutant-specific topics, post quarterly newsletters, announce clean-ups and other events, and to thank volunteers. Postings were seen by an average of 164 viewers per post throughout the year.
- BMP Factsheets for common operations are used to ensure proper guidance is being provided to assist tenants in making operational decisions that may help minimize exposure to stormwater. The BMP Fact Sheets are also distributed on an as needed basis to individuals and/or tenant commands when issues are noted during inspections or additional guidance is requested. BMP Fact Sheets were last revised in April 2023.
- DPW Environmental continued to team with the Conservation group and the Directorate of Family and Morale, Welfare, and Recreation (DFMWR) to passively distribute Stormwater Pollution prevention brochures to the public.
    - PCB Brochures, *The Dangers of PCBs, and How You Can Help: Learn how you can protect Yourself, your Family, and the Environment*, continue to be posted on trail heads and hunting kiosks to provide information to hikers and hunters on how to identify and report potential PCB containing equipment (i.e. old transformers), especially in remote areas of the installation.
    - The brochure *PCB Safety and Awareness* is also still available online in the iSportsman website. The iSportsman website is the access portal for hunting, fishing, and watercraft recreation at Fort Belvoir. The fishing page displays the brochure to make fishermen aware of PCBs and fish consumption. A total of 833 fishing licenses were applied for via the iSportsman website during this reporting period. Each license application is an opportunity for the public to interact with the brochure.
- Fort Belvoir provides multiple avenues for the public to get in contact with subject matter experts and/or to report pollution sources. Although these avenues were available, they were not always functional and/or may have provided out of date contact information to the public.
    - MS4 Contact information is located on the Fort Belvoir Environmental Division Webpage and provides a constant open channel for contacting the DPW Stormwater Program. Although the site was set up and contact information was provided, it was noted as having incorrect numbers and emails on occasion during the reporting period due to Army pushing updates that would revert the site back to listing older information and due to personnel turnover. It should be noted that although the MS4 number may have been incorrect sporadically, the posted number would still connect to the environmental office where calls could be routed to the correct person.
    - The Pollution Reporting Button was added to the website on 27 October 2020 to provide the public with a way to directly notify the Stormwater Program of any potential issues seen by the public. Quarterly tests of the button were recommended with the previous years' annual report.
    - One quarterly functionality test was performed on the Pollution Reporting Button on 10 July 2023.

The measurable goal to utilize at least one (1) strategy each season to provide the public topical information on the impacts their activities can have on stormwater runoff and measures or actions they can take to minimize that impact was met.

- Four (4) Seasonal Stormwater Newsletters were developed to cover high priority water quality topics like chloride, sediment, litter, and nutrients. The newsletter provided updates on permit compliance activities, trainings, and pollution prevention, including seasonally appropriate topics (i.e. de-icing in December, wash waters in June).
    - The newsletters explained the importance of preventing the different pollutants and how they affect current TMDL Action plans in place.
    - All forms of media contained information on pollution prevention practices that the public can utilize to minimize stormwater runoff pollutants.
    - Newsletters were distributed to Industrial Stormwater (ISW) permitted tenants, MS4 High Priority Facility (HPF) tenants, and published to the Environmental Division Facebook page.
        - Due to the shortage of dedicated personnel within the MS4 Program, there was a lack of social media use pertaining to the distribution of public education and outreach materials on the DPW Environmental Division Facebook page. The use of social media is essential in reaching out and educating the public on issues related to stormwater management, and Fort Belvoir plans to continue hiring more personnel to meet the increasing needs of the MS4 Program.
    - Newsletters were published on 25 September 2023; 21 December 2023; 19 April 2024; and on 27 June 2024. It should be noted that the summer, winter, and spring newsletters were not posted to the DPW Environmental Division Facebook page.
- DPW Environmental continued to coordinate with the Housing Group as an avenue to distribute information directly to Fort Belvoir Residents during this reporting cycle. The Housing Group utilizes the mass notification system, One Call Now, to communicate with all residents via email. Additionally, they maintain dedicated Facebook pages to communicate with residents.
    - A Fall article *Reporting Spills and Discharges* was distributed in September 2023 and covered how to recognize, respond, report, and record spills and illicit discharges.
    - A Winter article *Winter Weather and Watershed Health: What You Can Do* was distributed in December 2023 and covered harmful effects of ice melt on local streams, practices for use of ice melt, and provided tips for minimizing chlorides in stormwater runoff by using shoveling, sweeping, and proper application/storage.
    - A Spring article *Spring into Stormwater-Friendly Lawn Care* was distributed in April 2024 and covered how spring yard maintenance and fertilizer usage can impact stormwater and provided tips and management strategies for minimizing impacts of spring yard and garden work.
    - A Summer article *Scoop the Poop: Protect Our Water and Community* was distributed in June 2024 and explained the impacts of pet waste on stormwater and community health and provided reminders to pick up and dispose of pet waste properly.
- Fort Belvoir participated in several in-person events where presentations to housing, military, civilian, and contractor personnel living and working on Fort Belvoir could be used to educate the public on critical stormwater issues and their role in preventing pollutants from entering waterways. DPW participated in three (3) events where interactive displays were used to communicate stormwater topics to the public.
    - The EQCC Meeting on Salt Management was held on 25 October 2023, at the main DPW Environmental Building. Personnel presented to various tenant agencies and the Garrison Commander on common illicit discharge and illegal dumping issues and how to avoid them, explained types of authorized and unauthorized discharges, and instructed on how to report incidences to the Environmental Division. A total of 75 participants attended this event.
    - Earth Day was held on 22 April 2024 at the Natural Resources Education Center and families participating were able to interact with displays covering Common Stormwater Pollutants, Litter

& Plastic Pollution's Effect on Water Quality, and a Stormwater Pollution Prevention diorama. Approximately 21 people visited the displays and interacted with Stormwater personnel. Copies of stormwater educational materials were made available and included multiple brochures and Children's Activity Pages.

- Safety and Wellness Day was held on 19 May 2024, at the Fort Belvoir Exchange and provided an opportunity to interact with military and civilian personnel living and working on Fort Belvoir. Approximately 2,500 people attended the event, including 75 tenant representatives. The display at the DPW Environmental booth provided attendees an opportunity to observe how common pollutants break down in stormwater, talk about pollution prevention practices, share online resources, and provide a point of contact of stormwater related questions and concerns. Copies of stormwater educational materials were made available and include Brochures and Pamphlets. A total of 150 people visited the booth, and a total of 125 brochures were handed out during the event.

B. MCM#2 – PUBLIC INVOLVEMENT/PARTICIPATION

I. PART I.E.2.I. (1)

Provide a summary of any public input on the MS4 Program received and the permit holder responses.

Input Received on the MS4 Program:

The MS4 Stormwater Program completed an MS4 Program Plan update on 18 June 2024; however, it was not posted to the website for public comment. A summary of any comments received, if any, will be included with the next Annual Report as it is outside of this years' reporting period.

The 2022-2023 Annual Report was posted on the website on 30 October 2023 and no comments were received from the public. VADEQ requested additional information and/or clarification in an email dated 28 September 2023. Fort Belvoir submitted a response to this request to VADEQ on 28 September 2023. A summary of the VADEQ request and Fort Belvoir's response are as follows:

- VADEQ requested clarification on the submission of signatory designation from the environmental group under Part III.K of the MS4 General Permit. Fort Belvoir indicated that Micah Boersma had left, and Sybille Vega was able to obtain signatory authority on 17 August 2023 and signed the delegation letter. Fort Belvoir was currently without a permanent Environmental Division Director with no status on when a new one will arrive, so Sybille Vega maintained signature authority for the time being.

No additional comments from VADEQ were received and the 2022-2023 Annual Report was accepted on 28 September 2023.

Fort Belvoir maintains all TMDL action plans posted on the website and available to the public. Although no comments were received from the public. Details on these comments and Fort Belvoir responses are covered under Local TMDL Information of this Annual Report.

II. PART I.E.2.I. (2)

Provide a summary of stormwater pollution complaints received and the permit holder's responses.

Stormwater Complaints received during the 2023-2024 Reporting Period

All Stormwater complaints received from the public are managed under the IDDE program discussed under MCM #3. Public complaints are characterized under the 'Direct Notification' category. Fort Belvoir received 27 complaints as direct notifications made by someone outside of DPW trained staff. Incidents 24-05, 24-11, 24-12, 24-13, 24-14, 24-17, 24-18, 24-20, 24-24, 24-25, 24-26, 24-28, 24-29, 24-30, 24-33, 24-35, 24-36, 24-37, 24-38, 24-40, 24-42, 24-43, 24-44, 24-45, 24-47, 24-49, and 24-51 are discussed below:

- **24-05:** On 25 July 2023, American Water (AW) was notified around 1200 of a potential leak near units 5354 and 5350 on Orchard Court South in Woodlawn Village. AW tested the water and found no presence of chlorinated water entering any curb inlets. Upon further inspection, a DPW-ENV contractor observed the leak to be emanating between cracks in the driveways of both units and flowing down the street. There was heavy algae growth present and a slight smell of decaying organic matter. Two smaller leaks were observed at the end of the driveways for units 5365 and 5363B which were flowing directly into a nearby curb inlet with MS4 structure ID 4652. Fort Belvoir Community Housing was made aware

of the leak and performed the appropriate repairs. A final inspection was performed by a DPW-ENV contractor and confirmed the leak was repaired. Incident was closed on 8 September 2023.

- **24-11:** At approximately 0830 on 14 September 2023 a diesel fuel leak was spotted coming from an AECOM truck and spilling onto the concrete surface by Dock A at the National Geospatial-Intelligence Agency (NGA). The truck was removed at approximately 0930 and sent for repairs. At approximately 1245 an Environmental Specialist with NGA arrived at the site of the spill and determined no cleanup was needed as the stain had been dried up due to the sun and heavy winds. The stain itself was approximately 18 inches in diameter. Photo documentation of the incident was obtained by NGA on 17 October 2023. Incident was closed on 19 October 2023.
- **24-12:** A spill was observed by the generators behind the Central Utility Plant (CUP) at NGA. The spill was believed to be a petroleum-based product and was estimated to have occurred either on 14 October 2023 or 15 October 2023. An Environmental Specialist with NGA responded to the spill and took photos and documented site conditions on 18 October 2023. The contaminated soil was containerized, and an absorbent material (kitty litter) was placed on the asphalt to remove the staining. The area was then covered to protect the soil from the elements. On 29 November 2023, NGA communicated with DPW-ENV the test results on the soil samples indicating the soil was still contaminated so additional soil was removed from the site of the spill to ensure proper remediation. The waste soil was prepped for disposal and a Material Characterization Report was submitted on 10 January 2024 confirming two drums of waste soil will be transported off site and disposed of. The impacted area was then backfilled with clean soil on 6 February 2024 and photo documentation of the final site conditions was provided to DPW-ENV on 22 February 2024. Incident was closed on 22 February 2024.
- **24-13:** During a routine fill of an aboveground storage tank (AST) containing heating oil by Building 780, the tank was found to be leaking and approximately 400 gallons of heating oil had leaked onto the ground below the tank. The spill was reported to the Petroleum and Spill Response Program Manager and a drip pan was temporarily placed under the tank to contain the spill. On 25 October 2023 the remaining heating oil was removed from the tank and a tarp was placed over the tank and surrounding soil. The National Response Center (NRC) and VADEQ were notified of the spill and the corrective actions taken, with VADEQ requesting two soil samples be collected at either end of the tank before a remediation strategy can be devised. On 26 October 2023 a DPW-ENV contractor performed an initial investigation and documented the current site conditions. The soil sample results were received on 26 February 2024, and it was determined by VADEQ that soil remediation is necessary, and a Work Order/4283 was submitted to remove the impacted soil and backfill with fresh soil. The old AST was also replaced and moved to the front of the building. During the Earth Day event on 22 April 2024, a follow-up inspection of the site found that the contaminated soil has yet to be removed. Incident is still open pending removal of the impacted soil and backfilling the area with clean, fresh soil.
- **24-14:** AW personnel reported a sewer discharge at around 1125 on 26 October 2023 coming from a sewer manhole behind Building 1000. Efforts were made to stop the blockage and the water was shut off to prevent the sewage discharge from entering the nearby stream. A DPW-ENV contractor arrived on site to document site conditions and observed AW personnel spreading lime over the discharge. AW provided a summary of all corrective actions on 2 November 2023: the blockage and sewer lines were cleared, rags were raked up and the manhole was washed, approximately 10-15 lbs of lime was applied to the impacted area, the sanitary sewer overflow (SSO) was reported to DPW-ENV, and Fort Belvoir Community Housing was contacted regarding the excess rags and grease coming from nearby Cedar Village. The plans for Cedar Village were reviewed and it was discovered that Housing had tied into the existing sewer line as part of the Cedar Grove project. AW advised Housing on 10 January 2024 that they develop a Fats, Oils, and Grease (FOG) plan or a Capacity, Management, Operations, and Maintenance (CMOM) plan to prevent these kinds of issues from happening again. A DPW-ENV contractor performed a follow-up inspection of the area once Housing had rectified the issue and found no further evidence of the SSO in the surrounding area. Incident was closed on 16 January 2024.

- **24-17:** AW was alerted at approximately 0901 on 8 November 2023of a water main break off Shenandoah Road in River Village. An estimated 2,000 gallons of potable water made its way into a nearby storm inlet with MS4 structure ID 253 and no wildlife or environmental impacts were observed by AW personnel. The water main break was isolated, and the water was shut off at around 0925. A VADEQ pollution repot was filed under report number 311477 on the same day and was closed on 14 November 2023. AW was able to obtain a DIG permit and the water main repairs were completed on 7 December 2023. A DPW-ENV contractor performed a follow-up inspection of the area on 19 December 2023 and confirmed the repairs were made and no evidence of the leak was observed. Incident was closed on 20 December 2023.
- **24-18:** A water main break was discovered by AW personnel in River Village at approximately 0730 on 8 November 2023. An estimated 90,000 gallons of potable water discharged from the main break and made its way into the storm system via a storm inlet with MS4 structure ID 1291. On 10 November 2023, AW personnel were able to isolate the main break and shut off the water before making repairs and a VADEQ pollution report was filed under report number 311500 and was subsequently closed on 14 November 2023. AW personnel received approval for an emergency DIG permit and were able to complete the necessary repairs on 7 December 2023. A DPW-ENV contractor reached out to the Operations & Management (O&M) Division on 18 December 2023 and discovered the emergency DIG permit approval was given verbally by Ms. Dyott and once the repairs were completed, AW submitted the DIG permit request under permit number 24-047. A follow-up inspection of the area was performed on 19 December 2023 and determined the repairs were made and no evidence of the main break was observed. The DIG permit 24-047 was obtained from the Business Operations & Integration Division (BOID) on 31 January 2024. Incident was closed on 1 February 2024.
- **24-20:** AW received a notification at around 1500 on 13 November 2023 of a sewer backup at 9256 Potomac Loop at River Village. An estimated 3-5 gallons of sewage water discharged onto the resident's patio and did not enter the storm system. AW was able to clear the blockage within 30 minutes of the responding the incident and began to televise (TV) the lines to ensure the blockage was completely cleared. A DPW-ENV contractor performed an inspection of the area and noted no further evidence of the sewage discharge was observed and was notified by AW that no additional blockage in the sewer line was detected after the inspection. Incident was closed on 17 November 2023.
- **24-24:** A grease trap near the Alexander T. Augusta Military Medical Center (ATAMMC) had become clogged causing grey water and grease to overflow and seep into the surrounding soil and entered a nearby storm trench with MS4 structure ID 6823. The spill covered an area of approximately 25 feet by 6 feet (150 square feet) of soil and concrete and an estimated 20 gallons of grey water and 2 gallons of grease was discharged. On 7 December 2023, facilities notified the cafeteria to halt all activities and absorbent materials (absorbent sock/pillow) were laid out to absorb the grease and the remaining grey water and grease was pumped out of the trap and the spill materials were removed. Capital Tank and Drain then took the collected spill material and remaining liquid and transported it to their facility. ATAMMC submitted their spill report on 8 December 2023 outlining the corrective actions performed at the site of the spill. A DPW-ENV contractor performed an inspection of the area on 12 December 2023 and observed grease residue still present in the soil/grass with an accompanying grease odor. The ATAMMC Hazardous Waste Program Manager was contacted on 15 December 2023 regarding additional cleanup actions that may need to occur at the site of the spill as the provided spill report did not indicate if the grease that entered the nearby storm trench was cleaned out and if there were discussions on removing the impacted soil. A DPW-ENV contractor performed a follow-up inspection of the area on 6 February 2024 and discovered the grease odor and residue was still present, though no grease residue or odor was discovered near or in the storm trench. A third inspection was performed on 2 May 2024 and grease residue and odor was still present at the site of the spill. The ATAMMC Hazardous Waste PM was notified on 8 May 2024 that the grease odor and residue is still present and that soil remediation efforts need to be made as soon as possible. Soil remediation efforts are still pending and the impacted soil must be removed and the area backfilled with clean, fresh soil.

- **24-25:** During the late-night hours of 13 December 2023, a hydraulic lift malfunctioned causing approximately 2 gallons of hydraulic fluid to spill. The cause of the release was due to a failure of the seal/fitting on the outdoor hydraulic lift. The fluid made its way into a nearby stormwater catch basin but was isolated within the pad drainage system. The incident occurred at the Amazon Pad 2 – MDC 5 Hydraulic Lift at ADF-E. On 14 December 2023, Fort Belvoir Fire Dispatch was notified of the spill at around 1039, VADEQ Emergency Management Dispatch was notified around 1322, ADF-E Environmental Health and Safety (EHS) was notified around 1301, and NRC was notified around 1304. The spill response vendor arrived around 1200 and began the cleanup process. Absorbent materials and pads were placed to clean and isolate the spill. The cleanup was completed at around 1330 and all remaining spill materials were removed from the site. On 18 December 2023, ADF-E EHS notified DPW-ENV of the spill. Amazon Data Services provided DPW-ENV with their spill reports on 20 December 2023. The spill was properly contained, and the area was cleared of any remaining hydraulic fluid. Incident was closed on 20 December 2023.
- **24-26:** AW discovered a SSO at approximately 0400 on 18 December 2023 at Lift Station (LS) 687. There was a pump down scheduled, but due to the large amount of rain received during the previous weekend it caused the wet well to overflow. An estimated 750-1,000 gallons was discharged though the spill did not make it to the storm system. AW personnel notified DPW-ENV of the discharge and submitted a VADEQ pollution report under report number 311884. Later that morning, the water that had collected in the concrete holding apron for the sludge container had drained as the water levels in the wet well receded. On 19 December 2023, a DPW-ENV contractor performed an inspection of the area and found no further evidence of the overflow. The VADEQ pollution report was closed out on the same day. Incident was closed on 3 January 2024.
- **24-28:** A potable water discharge from a water main break near the Civil Air Patrol (CAP) building at Davison Army Airfield (DAAF) was discovered by AW personnel at around 1541 on 22 December 2023. An estimated 2,000 gallons of potable water was discharged to the surrounding area though the discharge did not make it to the storm system, but pooled in a low-lying swamp area near the CAP building and was contained. AW notified DPW-ENV of the water main break at around 1938 and a VADEQ pollution report was filed under report number 311953. Repairs to the water main were completed on 26 December 2023 and the VADEQ pollution report was closed out. A DPW-ENV contractor performed an inspection of the area on 22 January 2024 and confirmed that the repairs were made to the water main, and no further evidence of the discharge was present. Incident was closed on 22 January 2024.
- **24-29:** A spill was observed on 3 January 2024 along the length of Barta Road going towards the intersection of Heller Road near the North Area Fire Station. The spill was noted to be on the right-hand lane moving eastbound on Barta Road and appears to have originated across from the middle pedestrian bridge leading from the overflow parking lot, then veered right onto the exit lane for Heller Road and stopped halfway through the exit curve. The trail consisted of a wet center line about 6 inches wide and on either side of the line was a splash zone, with a total width of about 18 to 20 inches. The spill is suspected to be automobile transmission fluid and approximately 1-2 gallons was spilled onto the roadway, with the total length of the spill being approximately 1,500 feet. The spill did not make its way into the storm system. The spill was reported to NGA at around 1400 on 3 January 2024 and responded to the spill the same day. Due to the nature of the spill, it was recommended that no cleanup efforts be initiated as the spill did not pool and will likely dry on its own. A DPW-ENV contractor reviewed the NGA spill report on 10 January 2024 and concurred with the decision not to initiate cleanup efforts. Incident was closed on 18 January 2024.
- **24-30:** AW personnel discovered an overflow occurring at Lift Station (LS) 687 at approximately 2015 on 9 January 2024. Due to the high volume of rain received (approximately 2.5 inches) the pumps at the LS were unable to keep up with the rainfall and the wet well began dumping into the two designated overflow tanks. It was difficult to determine if the overflow made its way to Gunston Cove, however the station continued to pump down excess water throughout the night. About 1,715 gallons of sewage overflowed into the surrounding area in addition to about 44,707 gallons of infiltrated rainwater. No signs

of grey water were present around the LS and a VADEQ pollution report was filed under report number 312153 and subsequently closed out on 11 January 2024. Incident was closed on 16 January 2024.

- **24-33:** A backflow preventer device (BFP) near the ATAMMC was found leaking during the afternoon of 29 January 2024. An estimated 60 to 80 gallons per hour (GPH) had been leaking from the BFP since the discovery the leak. A storm pond is located directly adjacent to the BFP just north of Doerr Road and the leak has most likely made its way into the pond. On 30 January 2024, AW personnel notified DPW-ENV of the leaking BFP. AW and ATAMMC personnel scheduled to meet the following week to discuss the leaking BFP and determine the responsibility for repairs. The BFP device was shut off on 5 February 2024 and a DPW-ENV contractor performed an inspection of the area on 6 February 2024, and it was determined that the leak did not make its way into the nearby storm pond. AW and ATAMMC staff met and determined that the BFP is a DPW asset and DPW is the responsible party for performing the repairs. Waiting on DPW to make the proper repairs to the BFP device prior to closing out.
- **24-35:** A sewer backup occurred around 1745 on 30 January 2024 close to the intersections of Moyer and Maloney Roads near Dogue Creek. An estimated 75 gallons of sewage made its way onto the surrounding sidewalk and grassy area and no signs of grey water, odor, or toilet paper was present near the closest outfall and the discharge did not make it to the storm system. AW personnel were able to respond and contain the discharge by 2000 the same day. Additional manholes in the immediate area were investigated to check for any more blockages and lime was applied around the impacted area. A DPW-ENV contractor performed an inspection of the area on 6 February 2024 and found no further evidence of the discharge. Incident was closed on 7 February 2024.
- **24-36:** At approximately 0900 on 5 February 2024, transmission fluid from the cab area of one of the dump trucks at the AW Streams 3, 12, & 13 project site was discovered on one of the access roads. An estimated less than one gallon of transmission fluid spilled from the truck and the crew quickly deployed the spill kit and began remediation efforts. The impacted mulch was bagged and removed from the site for disposal. A DPW-ENV contractor performed an inspection of the area on 6 February 2024 and found no further evidence of transmission fluid on site. Incident was closed on 7 February 2024.
- **24-37:** Generators 1, 3, and 5 at the ADF-E Generator project were being tested on 7 February 2024 when diesel fuel was spotted leaking from the bottom of generator 3. Upon further inspection it was observed that both generators 3 and 5 were leaking from the bottom due to the open manual fuel return valves, which caused fuel to backflow into generator 1. Approximately 5 gallons from each generator, 10 gallons total, spilled onto the pads and surrounding area. The spill was successfully contained, and PIG absorbent mats/kitty litter was deployed on the spill to soak up the fuel and prevent the discharge from entering the storm system. Extra kitty litter was applied throughout the day to ensure all the diesel fuel was cleaned up, and the spill materials were properly disposed of after use. A DPW-ENV contractor performed an inspection of the generators during a routine ESC Inspection of the site and found no further evidence of the diesel fuel spill. Incident was closed on 13 February 2024.
- **24-38:** On 12 February 2024, a commercial truck driving through the Fort Belvoir North Area with a hydraulic man-lift (cherry picker) struck the low overhead barrier at high speeds, and the complete hydraulic lift mechanism was ripped clear off the truck and caused approximately 4 gallons of hydraulic fluid to spill in the immediate area (pool was approximately 8 by 10 feet in diameter). A thin train of hydraulic fluid flowed from the site of the crash about 150 feet down Barta Road and was estimated to be 6-10 inches wide. Site police had closed the east and west bound lanes of Barta Road, and a crane and flatbed truck arrived to remove the broken lift. Loose absorbent had been spread over the hydraulic fluid and absorbent booms and socks were placed at the end of the hydraulic fluid trail to prevent the spill from spreading further. The spill was contained by 0800 and the lift was removed at around 1015. The spill materials were removed from the site and the repairs were completed by 1130. NGA notified DPW-ENV of the spill on 13 February 2024 and provided a spill report. Incident was closed on 14 February 2024.
- **24-40:** A hydraulic fluid spill at the Area Maintenance Support Activity (AMSA) 91 was discovered around 1500 on 21 February 2024 during a test drive of one of the vehicles. The spill was located at the entrance/exit gate to the facility and approximately 1 ounce of fluid leaked from the vehicle. The spill was

immediately contained using dry sweep and did not make it to the storm system. A spill report was generated and provided to DPW-ENV. A DPW-ENV contractor performed an inspection of the area on 29 February 2024 and found no further evidence of the hydraulic fluid spill. Incident was closed on 29 February 2024.

- **24-42:** Free-standing oil, petroleum contaminated soil, and four fully or partially full containers of motor oil was discovered in Rossell Village between the garages of units 5528 and 5526 Caldwell Road at around 1330 on 2 February 2024. Oily footprints were seen scattered around the immediate area, indicating someone had walked through the spill. Approximately 5 gallons of oil had spilled; however, the spill did not make it to the storm system. By 1400 on the same day, utility locators arrived and marked the subsurface utilities in the vicinity the spill. Oil absorbent materials were applied, and the soil was then manually excavated and containerized in a 55-gallon drum. The area was cordoned off for safety purposes and the contaminated soil, used absorbent materials, and remaining oil were transported and disposed of. The Petroleum and Spill Response Program Manager sent the spill report to a DPW-ENV contractor, and a follow-up inspection of the area was performed on 7 March 2024 and observed no further evidence of the oil spill and the impacted area was properly backfilled and stabilized. Incident was closed on 7 March 2024.
- **24-43:** A water main break was discovered by Housing along Shenandoah Road in River Village around noon on 29 March 2024. The main break was reported to AW around noon and the water was shut off to allow repairs. A VADEQ pollution report was filed under report number 313373 and an estimated 50,000 gallons made its way into a nearby curb inlet with MS4 structure ID 253. Emergency DIG permit 24-107 was submitted and repairs were completed later the same day. The VADEQ pollution report was closed out on 3 April 2024 and an inspection was performed by a DPW-ENV contractor on 4 April 2024 and found no further evidence of the main break. Incident was closed on 4 April 2024.
- **24-44:** During annual BMP inspections, Aleut notified DPW-ENV on 1 April 2024 that BMP 3028, a bioretention pond, was filled with sediment which most likely came from the nearby construction project involving installation of a new generator and connecting the generator to existing transformers. DIG permits 23-027 and 23-050 for the completed construction project near Building 1458 were obtained to determine who was contracted to perform the work in the area. A DPW-ENV contractor performed an inspection of the BMP on 4 April 2024 with PowerSecure and MASTEC to determine the scope of their work and figure out the responsible party for performing the required maintenance on BMP 3028. The slopes surrounding the BMP do not appear properly stabilized and some erosion was spotted upslope of the BMP. After further investigation, it was determined on 29 April 2024 that PowerSecure was responsible for performing the maintenance on BMP 3028 and will need to coordinate to determine the scope of the maintenance work. As of now, PowerSecure is ready to perform the required maintenance once the plans for BMP 3028 can be located.
- **24-45:** On 3 April 2024, a fuel tanker leaving the fueling station at DAAF lost control and crashed into the fence line, spilling an estimated 5,000 gallons of fuel into the surrounding area and directly into Accotink Creek. Remediation efforts began the same day with HEPACO responding to the spill. Absorbent booms were placed along several sections of Accotink Creek as far down as the Poe Road Gate to absorb as much of the fuel as possible in addition to the Aqueous Film Forming Foam (AFFF), which contains PFAS, that was applied by the Fort Belvoir Fire Services to prevent ignition of the fuel as the chain link fence needed to be cut away to access the creek. The Petroleum and Spill Response Program Manager has yet to provide the spill report and the matter is still ongoing.
- **24-47:** AW personnel were performing routine preventative maintenance and removing sludge from the sludge container at LS 769 and 685 at around 1430 on 16 April 2024 when a fuel product was observed inside one of the sludge containers. An estimated 5 gallons of the fuel product was present inside the sludge container. Investigation of the surrounding area confirmed an odor of fuel was coming from LS 769 and that the source of the fuel was further upstream of LS 769. Absorbent booms were placed inside the sludge container to remove any remaining fuel. A DPW-ENV contractor inspected the area with AW personnel, and it was determined the origin of the fuel source was most likely coming from somewhere

near the outdoor recreation center. Fuel odor was obvious at manholes 07-064 and 07-040 and will need to be washed to remove any excess fuel residue. Correspondence between AW and the Hazardous Waste contractors occurred to determine how to properly dispose of the contaminated sludge from the LS. Samples of the sludge were taken on 16 May 2024 and further measures were discussed on 13 June 2024 to have the roll off dumpster cleared of the contaminated sludge without compromising the health and safety of AW personnel, as manually removing the sludge into 55-gallon drums would be too risky. AW is waiting for the contaminated sludge to be removed from the roll off dumpster.

- **24-49:** AW personnel were performing potholing at Building 2470 on 9 May 2024 when they discovered a water main leak. AW personnel quickly responded to the leak by pumping water out of the hole and flushing hydrants to reduce the water pressure. The water was dechlorinated prior to entering the storm system through a storm inlet with MS4 structure ID 5505 and repairs to the water main were made the same day. A DPW-ENV contractor performed an inspection of the area on 23 May 2024 and requested to AW that seed and straw be placed down where they backfilled after performing the water main repair. AW personnel went back to the site to grade and stabilize the area on 24 May 2024 and provided photo documentation of the completed work. Incident was closed on 30 May 2024.
- **24-51:** AW personnel were notified at around 2200 on 27 May 2024 regarding discharges from water towers 1190 and 589. Within 90 minutes AW personnel were able to isolate the discharges and resolve the issue. An estimated 50,000 gallons of water discharged from both water towers. A VADEQ pollution report was filed under report number 314121. On 28 May 2024, AW personnel notified DPW-ENV of the discharges and on 30 May 2024 a DPW-ENV contractor performed an inspection of both water towers and found no further evidence of the discharge at both areas. The VADEQ pollution report was then closed out on 31 May 2024. Incident was closed on 31 May 2024.

Open Stormwater Complaints from 2022-2023 reporting cycle

The following list summarizes complaints that remain open from the previous permit cycle received from the public. All Stormwater complaints received from the public are managed under the IDDE program discussed under MCM #3. There were zero (0) complaints that were direct notifications made by someone outside of DPW trained staff that remain from the previous permit cycle.

III. PART I.E.2.I. (3)

Provide a webpage address to the MS4 Program Plan and Stormwater Website.

Copies of the MS4 Program Plan, annual reports, and any other pertinent stormwater documents are posted on the Fort Belvoir Environmental Division Webpage under Programs and Documents, then MS4 Stormwater. Goals within the Program Plan include making documents available to the public by posting to the website within 30 days of any updates.

The website is used to provide the public with access to all required MS4 Documents required under Part I.E.2.b of the Permit to include the Program Plan, Annual Reports, TMDL Action Plans, Technical Bulletins and Stormwater Pollution Prevention information. An online Pollution Reporting button was added to the Environmental website on 27 October 2020 to allow anyone on Fort Belvoir to report illicit discharges more easily. Contact information for the Stormwater Team is also posted on the website.

As noted in MCM #1 discussions, the website has been experiencing technical issues as the Army pushes out updates throughout all standardized Department of the Army Facilities' webpages. This has led to issues such as delays in postings, losing file links, reverting to earlier site versions/information, and loss of functionality that affected access to program documents sporadically throughout the reporting period. Repairs to the website are ongoing and done outside of Fort Belvoir purview; therefore, to mitigate any future issues with accessibility, an update to the Program Plan BMP 2.1 will be made to require a minimum of quarterly checks of information and

links by DPW Environmental to ensure functionality or early identification of issues. This was recommended with the previous year annual report but was not updated; however, a test of the button performed on 22 May 2023 showed it was functioning as intended. One quarterly functionality test was performed on the Pollution Reporting Button on 10 July 2023 and no issues were encountered.

IV. PART I.E.2.I. (4)

Provide evidence of the current internal MS4 program and webpage to federal and state nontraditional permittees with security policies preventing public access to the MS4 program and webpage.

Fort Belvoir's MS4 Program and webpage is publicly available and does not require a security clearance for access.

V. PART I.E.2.I. (5) THROUGH (7)

Provide a Description of the Public Involvement Activities implemented during the reporting period including any efforts to reach out and engage all economic and ethnic groups. A minimum of four activities per year from two or more categories listed in Table 2 of the MS4 General Permit. Provide a description of all public education and outreach activities conducted that included education regarding climate change. Provide a report of the metrics used to define effectiveness for each activity and an evaluation as to whether the activities are beneficial to improving water quality.

Over four (4) public involvement activities were conducted during the 2023-2024 reporting cycle from the Pollution Prevention, Restoration, Educational Event, and Monitoring categories.

- Pollution prevention activities included educating the public via articles published through the various avenues and distribution of Pollution Prevention Brochures. To improve water quality, individuals must have awareness of issues (what), an understanding of how it impacts them or something they care about (why) and be empowered with the knowledge of what they can do (how) to change their behaviors. The ultimate intent of all articles and brochures is to educate, encourage, and empower the audience to implement best management practices, to be more alert to potential pollution concerns in their daily activities, and to report potential issues to DPW for investigation.

  Effectiveness of these activities is measured by the number of publications and the number of people reached through each publication as well as the number of brochures distributed. The number of reports or questions received from resident or recreational customers via contact information provided in published materials also serves as a metric.
  - Publication of numerous articles to a large distribution of people with consistent messaging continued during this reporting cycle.
  - Brochures were distributed both actively during educational events and passively as hiking kiosk postings and website links.
  - 27 public complaints were received during this reporting period.
- Restoration activities included two (2) clean-up events, which prove beneficial by providing a space where residents and employees living and working at Fort Belvoir can dispose of trash and other bulk items to prevent illegal dumping. Effectiveness of these events are measured by the amount of trash and bulk items collected.
  - The USAG Fort Belvoir 2023 Fall Clean Up Campaign occurred on 7-9 November 2023, where the garrison community was invited to pick up litter and trash in their organization's footprint and given the opportunity to bring bulk items, recyclables, and yard waste to a collection point for appropriate disposal. This effort removed 16.91 tons of waste from Fort Belvoir.

  - The USAG Fort Belvoir 2024 Spring Clean Up Campaign occurred from 23-25 April where the garrison community was invited to pick up litter and trash in their organization's footprint and given the opportunity to bring bulk items, recyclables, and yard waste to a collection point for appropriate disposal. This effort removed 8.25 tons of waste from Fort Belvoir.
  - The Potomac Watershed Clean-up was scheduled for 21 April 2024, where usually the public gets involved in cleaning up the Tidal Basin. Due to a large fuel spill at the Davison Army Airfield (DAAF), the clean-up event was cancelled as the spill was a threat to public health and safety. This event is scheduled to resume in the upcoming reporting period.
- Planting events (Restoration) are beneficial to improving water quality by removing or limiting potential erosion that may contribute to sediment pollution. Effectiveness of these events are measured by the number of volunteers involved and number of plantings completed.
  - No planting events occurred during this reporting period.
- Educational events serve as a means of raising awareness of water quality issues and why they are important and promoting improved practices. The aim of this awareness and knowledge is to change public behaviors that impact water quality, making these events very beneficial to improving water quality. Effectiveness of these events are measured by the number of attendees and the number of brochures handed out.
  - The EQCC Meeting on Illicit Discharge and Illegal Dumping occurred on 25 October 2023 and was an event where DPW Environmental personnel presented to various tenant agencies and the Garrison Commander about common illicit discharges and illegal dumping occurrences across the garrison. This presentation also included information on authorized and unauthorized discharges and how to report incidents to the Environmental Division. A total of 75 participants attended this event.
  - The Stormwater Walk was scheduled to occur on 3 November 2023 and consisted of DPW Environmental personnel working with the Fort Belvoir MWR Library to engage with the community and educate on stormwater, particularly how stormwater flows through a system, how pollution and climate change impact stormwater, and how to identify stormwater features. The event was to include activities where participants, mostly school aged children, would model stormwater and pollution flow through a watershed, participate in a stormwater walk to identify stormwater flow paths and MS4 features, and label and unmarked stormwater features with "No Dumping" placards. This event did not have any public participants due to lack of advertising and a change in the community school's early release schedule.
  - The Earth Day Celebration occurred on 22 April 2024 and consisted of DPW Environmental Personnel interacting with and educating the public via four (4) displays that: identify common stormwater pollutants, explain how litter and plastic pollution effects water quality, how various pollutants end up in our waterways, and what is erosion and how it impacts water quality. Five (5) different brochures as well as children's activity pages were available for participants. Twenty-one residents attended this event and five (5) of each brochure were handed out.
  - Fort Belvoir Safety and Wellness Day occurred on 16 May 2024 and was attended by approximately 2,500 soldiers and civilians and 74 tenant representatives. Fort Belvoir Environmental Division educated participants using brochures and interactive displays, including the popular stormwater pollutant jars and stormwater trivia questions. Personnel communicated pollution prevention tactics to participants, shared online resources, and provided points of contact for stormwater related questions and concerns. 150 community members visited the booth, and 125 brochures were handed out.
- The online 'Pollution Reporting' button/form (Monitoring) on the Environmental website provides an avenue for the public to anonymously report potential pollution sources and concerns directly to DPW. This strategy complements the Education and Outreach Plan by working to increase the number of people across the installation who are alert to potential pollution sources, and empowering and equipping them to report concerns. Supporting a larger group of people who are monitoring for potential pollution sources

benefits water quality. Effectiveness is measured by the number of reports received via the online reporting system. No reports were received this reporting period through the online reporting system.

Table 2 below shows the activities and metrics used in determining effectiveness for the public involvement activities that were conducted. Supporting documentation is available upon request.

Table 2: Public Involvement Activities (1 July 2023 – 30 June 2024)

Date	Name of Event/Activity	Category from Permit Table 2	Metric
Oct 2023 Dec 2023 Apr 2024 June 2024	Articles published in Housing Newsletter promoting Residential BMPs	Pollution Prevention	Email distribution: ~2,800
25 Oct 2023	EQCC – Illicit Discharges	Educational Event	Attendees: 74
9 Nov 2023	Fall Clean Up Campaign	Disposal or Collection Event	16.91 Tons of Waste Removed
22 Apr 2024	Earth Day Celebration	Educational Event	Attendees: 21 residents Displays: Two (2) Interactive Displays Brochures: 15 distributed
25 Apr 2024	Spring Clean Up Campaign	Disposal or Collection Event	8.25 Tons of Waste Removed
16 May 2024	Safety and Wellness Day	Educational Event	Attendees: 2,500 Soldiers/Civilians 74 Tenant Representatives Displays: Two (2) Interactive Displays Brochures: 125 distributed
Ongoing	Anonymous Online Pollution Reporting Button/Form	Monitoring	Zero (0) Reports Received

VI. PART I.E.2.I. (8)

Provide the names of other MS4 permittees with whom collaboration with public involvement activities occurred within the reporting period.

Fort Belvoir does not currently collaborate with any other MS4 permittees for public involvement activities held.

VII. REVIEW OF MCM#2 PROGRAM EFFECTIVENESS

For the reporting period, 1 July 2023 – 30 June 2024, Fort Belvoir completed the following actions to maintain compliance with permit conditions of the MS4 General Permit that became effective on 1 November 2023:

- Fort Belvoir has provided multiple methods for the public to report illicit discharges, improper disposal, spills, and other complaints as required by Part I.E.2.a.(1).
    - Potential pollution issues have always been able to be reported to DPW via a phone call or email.
    - The Pollution Reporting Button was added to the website on 27 October 2020 to provide the public with a way to directly notify the Stormwater Program of any potential issues remains in place. No reports were received this reporting period through the Pollution Reporting Button.
- The public can provide comments and input on the Program Plan any time via phone or email as required under Part I.E.2.a.(2).

  - The MS4 Program Plan was updated on 18 June 2024. The updated MS4 Program Plan was submitted to the PAO on 20 June 2024 to publish to the DPW-Environmental webpage, however PAO has yet to do so. A public comment period will follow once the updated MS4 Program Plan is posted to the webpage. The updated MS4 Program Plan was not posted to the website and was not made available for public comment.
- Fort Belvoir maintains a webpage dedicated to the MS4 Program and Stormwater Pollution Prevention, as required by Part I.E.2.b. located here: Fort Belvoir Environmental Division Webpage under the Programs and Documents, then MS4 Stormwater. The website is used to provide the public with access to all required MS4 Documents to include the Program Plan, Annual Reports, TMDL Action Plans, Technical Bulletins, and Stormwater Pollution Prevention information.
  - PAO now requires anything posted to the public webpage must go through their office for review. This has caused significant delays in the posting of the required MS4 documents listed above on the DPW-Environmental webpage. A status check was performed on 30 June 2024 and showed the following documents were missing or had not yet been updated:
    - The Program Plan was updated on 18 June 2024 and was submitted to PAO on 20 June 2024; however, PAO has not posted the updated plan to the webpage.
    - The Bacteria TMDL Action Plan was updated on 24 August 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The Chloride TMDL Action Plan was updated on 22 August 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The Sediment TMDL Action Plan was updated on 6 September 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The PCB TMDL Action Plan was updated on 6 July 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The Phase III Chesapeake Bay TMDL Action Plan was updated on 5 September 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
  - The 2022-2023 Annual Report was posted on the Fort Belvoir website on 30 October 2023, as required by Part I.E.2.b.(3) of the permit.
  - BMP Fact Sheets were last updated in April 2023 and posted on 20 June 2023.
- Fort Belvoir conducted seven (7) public involvement activities as described above from four (4) different categories listed in Table 2 as required by Part I.E.2.c of the MS4 General Permit.
- No public involvement and participation activities were conducted during this reporting period that specifically discussed climate change.

All BMPs (BMP 2.1 and 2.2) for the Public Involvement/Participation MCM continue to remain effective and meet permit requirements. As detailed above, Army server updates presented website challenges during this reporting period, as well as staffing issues. Updates to the MS4 Program Plan shall been made to mitigate any future issues with accessibility to files and to ensure that Belvoir continues to meet permit requirements. How Fort Belvoir achieved compliance with the measurable goals for MCM #2 is discussed below.

BMP 2.1 MAINTAIN A WEBPAGE DEDICATED TO THE MS4 PROGRAM AND STORMWATER POLLUTION PREVENTION

The current webpage provides public access to all MS4 Program Documents required under Part I.E.2.b of the Permit, including the effective MS4 Permit and coverage letter, current Program Plan, and Annual Reports for each year of the terms covered by the current permit. The webpage also provides methods for how the public can

provide input on the permittee's MS4 Program Plan as well as a mechanism for the public to report potential illicit discharges, improper disposal, spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns. The MS4 Stormwater Program Administrator is responsible for ensuring that all permit required MS4 Stormwater Program documents are posted on the Fort Belvoir Environmental Division Webpage under 'Programs and Documents' and then 'MS4 Stormwater Program'.

Additionally, all developed TMDL Action Plans, Technical Guidance Bulletins for Construction Projects, and Fact Sheets covering over 25 Operational Best Management Practices are made available on the webpage. (Fact Sheets and Master stormwater pollution prevention plan (SWPPP) are located under the Industrial Stormwater or ISW tab on the webpage).

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to maintain a webpage with the effective MS4 Permit and coverage letter, Program Documents, and Annual Reports for each year of the terms covered by the current permit and to post copies of each annual report on the Fort Belvoir webpage within 30 days of submittal to the VADEQ was partially met.

- The 2023-2028 MS4 Permit and coverage letter and the most current MS4 Program Plan were not made available on the DPW Environmental Webpage and did not meet the permit requirements specified in Part I.E.2 for public involvement and participation.
- All Annual Reports for this permit cycle are available on the webpage. The 2022-2023 Annual Report was submitted to VADEQ on 28 September 2023 and posted on 31 October 2023. This 2023-2024 Annual Report will be posted within 30 days of submittal to VADEQ. A status check was performed on 30 June 2024 and showed the following documents were missing or had not yet been updated:
    - The Program Plan was updated on 18 June 2024 and was submitted to PAO on 20 June 2024; however, PAO has not posted the updated plan to the webpage.
    - The Bacteria TMDL Action Plan was updated on 24 August 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The Chloride TMDL Action Plan was updated on 22 August 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The Sediment TMDL Action Plan was updated on 6 September 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The PCB TMDL Action Plan was updated on 6 July 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
    - The Phase III Chesapeake Bay TMDL Action Plan was updated on 5 September 2023 and was submitted to PAO to link to the DPW-Environmental webpage; however, the updated Plan has yet to be posted.
- Additional staffing deficiencies made it difficult to ensure access was maintained to the webpage and updates were made in a timely manner.

The measurable goal to maintain a copy of the current MS4 Program Plan on the webpage, review and update the MS4 Program Plan at a minimum of once per reporting period, and post copies within 30 days of any updates was not met.

- The MS4 Program Plan underwent a review and update in December 2023 and was completed and finalized on 18 June 2024. This updated Program Plan has not yet been posted to the website. Fort Belvoir DPW is working with the PAO to post this document.

The measurable goal to provide contact information where the public can submit comments on the stormwater program documents and can report illicit discharges, improper disposal, spills to the MS4, complaints regarding land disturbing activities, and other potential stormwater concerns as well as maintain the reporting/Complaint button established in 2020 was partially met.

- The website provides contact information for the MS4 Program and all DPW Environmental contacts which helps in providing a constant open channel for contacting the DPW.
- The Pollution Reporting button/form that was made available online on 27 October 2020 remains in place. One (1) quarterly functionality test was performed on 10 July 2023 for the Pollution Reporting Button during the 2023-2024 reporting period and no issues were found.
- As discussed above, the MS4 Stormwater group received 27 public complaints.
- An additional link for "Report a Spill" was implemented on the DPW Environmental SharePoint on 24 May 2023. This button is intended to be an additional means for tenant agencies to be able to report an illicit discharge or spill. No reports were received via the button during this reporting period.

BMP 2.2 PUBLIC PARTICIPATION

Fort Belvoir runs a public participation program that involves a wide audience including 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. During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to implement no less than four (4) activities per year from two (2) or more categories listed in Part I.E.2.d of the permit and to involve tenant agencies, schools, community partners, and other members of the public was met.

- This goal was exceeded during the reporting period, with Fort Belvoir providing six (6) activities where the public was able to directly participate and one (1) activity (reading articles) that were passively available for the public to initiate involvement. The seven (7) activities in four (4) different categories are described in Table 2 above.

C. MCM#3 – Illicit Discharge Detection and Elimination

I. Part I.E.3.e. (1)

Provide a confirmation statement that the MS4 map and outfall information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year.

To the best of our knowledge, the DPW-Stormwater team has updated the MS4 Map and Information table for all new, removed, and retrofitted structures for projects completed during this reporting year.

AECOM Technical Services, Inc. (AECOM) was contracted to manage the database and completed updates for new projects as they were completed to include updates to the information tables as required under Part I.E.3.a of the permit. These new projects are summarized in Table 3 below. The updated information tables with data for these new structures is included in Appendix B.

Table 3: Structures Added/Removed from the MS4 Map and Information Table

Project Name	CGP Number	Stormwater Management Facilities Added	Outfalls/Outlets Added
Davison Army Airfield Facility (DAAF) Fueling Systems Repairs	No CGP	1 x Bioretention Level 1 (ID# 9073)	N/A Tied into existing system
Building 386 Human Performance Training Center (HPTC) Addition	No CGP	1 x Bioretention Level 1 (ID# 9074)	N/A Tied into existing system

II. Part I.E.3.e. (2)

Provide the total number of outfalls screened during the reporting period.

AECOM was contracted to perform Outfall Reconnaissance Inventory (ORI) screening during the reporting period 1 July 2023 – 30 June 2024. A total of 50 outfalls were chosen for screening for the permit year-1 prioritization schedule developed as required by Part I.E.3.c.(2).(a). Six (6) outfalls (12%) were picked to be re-screened based on findings from the previous reporting period (2022-2023 permit cycle). A summary of results from the screenings are discussed below and included in Appendix D.

2023-2024 Outfall Reconnaissance Inventory (ORI) Screening

Based on the outfall screenings completed between 1 July 2023 and 30 June 2024, DPW Personnel identified two (2) outfalls with an obvious illicit connection (984 and 2992), no outfalls as being suspect of an illicit discharge, and three (3) outfalls that had a potential for illicit discharges (5050, 6951, and 7272), and the other 45 outfalls were found to be Unlikely to have an illicit discharge. Some of the outfalls (984, 5050, and 6951) noted as having an obvious, suspect, or potential for illicit discharges were previously identified and are a part of the periodic monitoring program, discussed in the next section. New outfalls (2992 and 7272) identified with potential issues are covered below:

- **2992:** Outfall was screened on 13 March 2024 and was not flowing at the time of inspection. The outfall structure itself seems to be in good condition. A light colored, clay-like sediment discharge was observed within the pipe and in the receiving channel and appears to be sediment discharge from a nearby work site. The sediment was washed out of the pipe from the heavy rain received on 9 March 2024. Runoff from construction sites is considered an illicit discharge and will need to be thoroughly investigated.

Actions Taken/Recommended: To determine the source of the construction runoff, a trunk investigation will need to occur in addition to periodic screening of the outfall. It is recommended that this outfall be monitored for a minimum of six (6) months (through August 2023) to try to identify the source of the construction runoff. It is recommended that this outfall be placed on the ORI list for the 2024-2025 permit cycle.

- **7272:** Outfall was screened on 13 March 2024 and was found to be flowing at the time of inspection, and a pool sample was taken. The pool exhibited a greenish color which indicates possible algae growth, and the outfall structure appears to be in good condition. Hach Water testing was used to test for pH 6.85 SU, Ammonia 0.00 mg/L, Free Chlorine 0.00 mg/L, Total Chlorine 0.04 mg/L, Nitrate 1.00 mg/L, Nitrite 0.004 mg/L, Fluoride 0.00 mg/L, and Phosphate 0.08 mg/L. The Nitrate levels are close to the threshold value of 2.2 mg/L and the algae growth around the pipe and in the pool is indicative of this.

  Actions Taken/Recommended: To determine the source of the elevated Nitrate levels a trunk investigation will need to occur in addition to periodic screening of the outfall to try to determine a source of the elevated Nitrate levels. This outfall should be placed on the periodic screening list for continued monitoring.

Continued Outfall Monitoring for 2023-2024 Reporting Period

Six (6) outfalls (984, 2490, 2519, 5050, 6935, and 6951) from previous reporting periods had outstanding corrective actions that were followed up on under the periodic screening program during the 2023-2024 reporting year. The history of investigations and actions taken to close the incidents for the six (6) outfalls with outstanding corrective actions are described below.

In general, when an outfall or any other structure is found to need repairs, work orders are submitted to the Base Operations contractor for action. The ORI screening provides the DPW Environmental Stormwater Facility Maintenance Liaison a summary of the types of repairs needed/recommended for each structure. The Liaison then submits requests for repairs to the O&M Division and works with them on prioritization of repairs. The O&M Division sorts through work orders, assigns them to the Base Operation Contractor for a quote/estimate, and then authorizes repairs as funding becomes available. DPW Environmental tracks all work orders, provides additional guidance as needed, and ensures that repairs completed adequately reduce erosion and provide for a functional MS4 system. A maintenance and repair tracker has been added to the Outfall Reconnaissance Inventory (ORI) Summary Table in Appendix D for tracking these actions.

MS4 Structure ID 984:
Status: Unresolved; Investigate further to determine the source of the flow into inlet 993.

- During the 2020-2021 outfall inspection it was found to have moderate flow at the time of inspection. A sample was not collected as the outfall was inaccessible at the time. Source tracking showed no overland sources of flow were found during the investigation. The report noted that at inlet 988 there is an underground pipe discharging that was not shown in the SW map. It was recommended that this outfall be rescreened to determine the source of flows into inlet 988, if they are consistent, and if an illicit connection exists.
- During the 2021-2022 reporting period, the outfall was found to be flowing, and a sample was taken from the flow, with phosphate levels of 0.46 mg/L, ammonia levels at 0.65 mg/L, and fluoride levels at 0.48 mg/L. While the phosphate and ammonia levels are not over the illicit discharge threshold, the fluoride levels are above the 0.25 mg/L threshold indicating potable water. A trunk investigation performed this reporting period confirmed an unknown pipe flowing into structure 993 (incorrectly noted on previous

report as 988, no unknown pipe was seen in structure 988) coming from Building 247 which is considered either a roof drain or an illicit connection within the building. It is recommended that this outfall is placed on the periodic screening list for continued monitoring, to include plan review and/or facility investigation to determine the source of the unknown pipe.

- During the 2022-2023 reporting period, the outfall was observed to be flowing, and a sample was taken from the flow. Hach water testing was performed and showed elevated levels of Free Chlorine at 0.15 mg/L and Nitrate at 1.4 mg/L, but not above the illicit discharge thresholds of 0.2 mg/L and 2.2 mg/L, respectively. The Fluoride levels at 0.8 mg/L and Phosphate levels at 1.32 mg/L are above the illicit discharge thresholds of 0.25 mg/L and 1.0 mg/L, respectively. The high fluoride concentration is indicative of potable water discharge and the high phosphate could be attributable to bacterial decomposition of organic matter at the bottom of the pool or potentially from clogged roof drains. A trunk investigation performed this reporting period confirmed an unknown pipe flowing into structure 993 coming from Building 247 which is considered either a roof drain or an illicit connection within the building. The plans for Building 247 were reviewed in June 2023 and a roof drain that ties-in directly to area inlet 993 was seen, likely indicating an illicit connection. It is recommended that this outfall be placed on the ORI list for the 2023-2024 permit cycle and monitored annually until the source of the illicit discharge is identified, corrected, and verified.
- During the 2023-2024 reporting period, the outfall was found to be flowing, and a sample was taken from the flow, with Nitrate levels of 3.4 mg/L, Phosphate levels at 0.88, and Fluoride levels at 0.3 mg/L. Phosphate levels dropped below the 1.0 mg/L benchmark value, however, is still elevated. The Nitrate and Fluoride levels were above their benchmark values of 2.2 mg/L and 0.25 mg/L, respectively. The high fluoride concentration is indicative of a potable water source nearby and the high nitrate levels indicate excessive use of fertilizers or another point source close by. The receiving channel will need to be regraded and stabilized to prevent erosion and/or pooling. It is recommended that this outfall be placed on the ORI list for the 2024-2025 permit cycle and monitored annually until the source of the illicit discharge is identified, corrected, and verified.

MS4 Structure ID 2490:
Status: Resolved; testing showed the pH levels were within the permit benchmark values of 6.0 to 9.0 Standard Units (S.U.) and no signs of illicit discharge was present in and around the outfall, and the low pH during the 2022-2023 reporting period was assumed to be due to natural sources such as decaying organic matter, high iron levels, etc.

- This outfall was investigated during the 2022-2023 reporting period and was found to be flowing at the time of inspection and outfall was buried in approximately one (1) inch of sediment. The pH was found to be below the permit benchmark values of 6.0 to 9.0 S.U. and source tracking was performed however no source for the low pH was discovered. The pH was tested for a second time and was confirmed to be below the permit benchmark. It is recommended that this outfall be placed on the ORI list for the 2023-2024 permit cycle and monitored annually until the source of the illicit discharge is identified, corrected, and verified.
- During the 2023-2024 reporting period the outfall was screened again and was fond to be flowing at the time of inspection and the outfall was buried in approximately five (5) inches of sediment. The pH was tested and was within the permit benchmark. This indicates that the source of the low pH values was most likely due to natural sources (e.g., decaying organic matter, high iron levels, etc.). No additional screening is recommended.

MS4 Structure ID 2519:
Status: Resolved; testing showed the pH levels were within the permit benchmark values of 6.0 to 9.0 Standard Units (S.U.) and no signs of illicit discharge was present in and around the outfall, and the low pH

during the 2022-2023 reporting period was assumed to be due to natural sources such as decaying organic matter, high iron levels, etc.

- This outfall was investigated during the 2022-2023 reporting period and was found to be flowing at the time of inspection and contained iron flocculate. The pH was found to be below the permit benchmark values of 6.0 to 9.0 S.U. and source tracking was performed however no source for the low pH was discovered. The pH was tested for a second time and was confirmed to be below the permit benchmark. It is recommended that this outfall be placed on the ORI list for the 2023-2024 permit cycle and monitored annually until the source of the illicit discharge is identified, corrected, and verified.
- During the 2023-2024 reporting period the outfall was screened again and was fond to be flowing at the time of inspection and contained a biological sheen and iron flocculate. The outfall structure was also observed to have some damage, specifically to the headwall structure. The pH was tested and was within the permit benchmark. This indicates that the source of the low pH values was most likely due to natural sources (e.g., decaying organic matter, high iron levels, etc.). No additional screening is recommended.

MS4 Structure ID 5050:
Status: Unresolved; testing showed that free chlorine levels fell within the permit benchmark of 0.2 mg/L during the 2023-2024 reporting year; however, pH remains outside the permit benchmark so continued monitoring will need to occur to ensure the free chlorine results are confirmed to be within the permit benchmark and if low pH is due to natural sources (e.g., decaying organic matter, high iron levels, etc.).

- This outfall was screened during the 2022-2023 reporting period and was found to be flowing at the time of inspection and iron flocculate was present. Free chlorine and pH values were outside of the permit benchmarks and source tracking was performed to track any potential pollutants. The source tracking did not reveal obvious pollutant sources, and both free chlorine and pH were tested for a second time and confirmed to be outside the permit benchmarks. It is recommended that this outfall be placed on the ORI list for the 2023-2024 permit cycle.
- During the 2023-2024 reporting period the outfall was found to be flowing at the time of inspection and a biological sheen and iron flocculate was present. The free chlorine levels fell within the permit benchmark, however pH remained outside the permit benchmark. To determine the source of the low pH, it is recommended that this outfall be placed on the ORI list for the 2024-2025 permit cycle.

MS4 Structure ID 6935:
Status: Resolved; during the 2023-2024 reporting period the outfall was found to have been removed due to the ongoing Fort Belvoir North Area Distribution Center (FBNA DC) construction project.

- This outfall was screened during the 2022-2023 reporting period and was found to be flowing at the time of inspection and iron flocculate was present. The pH was found to be outside the permit benchmark values and the outfall was rescreened again to confirm the low pH. It is recommended that this outfall be placed on the ORI list for the 2023-2024 permit cycle.
- During the 2023-2024 reporting period, the outfall was found to have been removed due to the ongoing construction project in the area. No additional screening is recommended.

MS4 Structure ID 6951:
Status: Unresolved; testing showed no presence of detergents, however, must investigate source of diesel as hydrocarbons testing showed presence of Diesel range organic compounds (DRO).

- During the 2019-2020 reporting period, outfall 6951 contained a trickle flow and presence of suds during the time of inspection. Source tracking was performed for the drainage area but only an upstream ponding/wetland area was found feeding into the outfall.

- This outfall was not investigated during the 2020-2021 reporting period due to access restrictions due to Covid-19 and reinvestigation was noted to be continued during the 2021-2022 reporting period.
- During the 2021-2022 reporting period, outfall was found to have a moderate flow and a sample was taken from the flow, with test results showing slightly elevated levels of Nitrate at 1.0 mg/L and Nitrite at 0.37 mg/L, but no exceedances when compared to the illicit discharge thresholds. Outfall had a sheen, suds, sulfide as well as petroleum/gas odor, and orange color present and is suspect for an illicit discharge. The sheen that was present re-coalesced when disturbed and is believed to be petroleum, oil, or lubricants. The suds that were present did carry odors of sulfide, with a petroleum/gas smell also present. The suds are thought to be associated with the natural decay of organic matter from the ponding area upstream, while the petroleum/gas odor is believed to be an illicit discharge. Source tracking did not find a point source but confirmed an upstream ponding/wetland unconverted stormwater area. During the previous reporting period, it was stated that a detergent test would be performed; this did not occur this reporting period. It is recommended that this outfall is placed on the ORI list for the 2022-2023 reporting period, to include a detergent test for the suds as well as additional sampling for hydrocarbons (to be coordinated with the Petroleum Program Manager) to eliminate or confirm sources of the sheen and petroleum/oil odors.
- During the 2022-2023 reporting period, the outfall was found to have a moderate flow with a sample taken from the flow, with test results showing no elevated levels of pollutants when compared to illicit discharge thresholds. Source tracking was performed which confirmed the upstream ponding/wetland unconverted stormwater area. Hydrocarbon sampling was performed on 16 March 2023 and a sulfur smell was present during sample collection. No hydrocarbons were detected when testing for oil, grease, and TPH and GRO. The DRO testing showed presence of diesel range organics between C10 and C28, which indicates diesel is present in the discharge from this outfall. The outfall was screened for detergents using the Hach Detergents Test Kit and found no presence of detergents, confirming the suds are associated with the natural decay of organic matter from the ponding area upstream. It is recommended that this outfall be placed on the ORI list for the 2023-2024 permit cycle, to determine where the diesel source is coming from.
- During the 2023-2024 reporting period the outfall was observed to be flowing at the time of inspection. A biological sheen, suds, and iron flocculate were present, and the flow line exhibited a brownish-orange color. Detergents testing was performed, and the suds are believed to be a result of the natural decay of organic matter from the ponding area upstream as no detergents were present in the flow. There was no obvious sign of hydrocarbons; however, during the 2022-2023 reporting period DRO was present, so hydrocarbons testing was scheduled to be performed again to determine if the presence of DRO was a one-off event. The sampling was unable to be conducted due to unsafe conditions when attempting to access the outfall, so the testing will be performed during the 2024-2025 reporting period. It is recommended that this outfall be placed on the ORI list for the 2024-2025 permit cycle.

New Investigations for 2023-2024 Reporting Period

There is one (1) new outfall (2992) added to the screening list requiring further investigations for the 2024-2025 reporting period based on 2023-2024 ORI results. The history of the outfall and anticipated closure requirements are discussed below**.**

MS4 Structure ID 2992:
Status: Unresolved; further investigation necessary to determine the source of the construction runoff found in and around the outfall.

- Outfall was screened during the 2023-2024 reporting period and was not flowing at the time of inspection. A light colored, clay-like sediment discharge was observed within the pipe and in the

receiving channel and appears to be sediment discharge from a nearby work site. The sediment was washed out of the pipe from the heavy rain received prior to the investigation. To determine the source of the construction runoff, a trunk investigation will need to occur in addition to periodic screening of the outfall. It is recommended that this outfall be placed on the ORI list for the 2024-2025 permit cycle.

III. PART I.E.3.E.(3). (A) – (F)

Provide a list of illicit discharges to the MS4, to include spills that reached the MS4 or surface waters. A summary of each investigation conducted by the operator includes: the location and source of the discharge, dates the discharge was observed, the method of discovery, incident resolution, any follow-up investigations, and the date the incident was closed.

AECOM was contracted to manage and respond to illicit discharge issues across Fort Belvoir during the 2023-2024 reporting period. Illicit discharges were discovered utilizing windshield inspections, direct reporting, and DPW inspections.

A total of 74 incidents were handled during the 2023-2024 reporting period: 52 were new reports of potential illicit discharges that were investigated, and 22 incidents were originally reported during previous reporting periods and had follow-up actions during this reporting period. A summary of each investigation including the required details listed in Part I.E.3.e.(3).(a) - (f) is provided in Appendix E. Full incident records for illicit discharges are available upon request.

The status of the 74 found incidents is as follows:

- 52 incidents were closed.
  - 43 were new incidents
  - Nine (9) were incidents reported during previous reporting periods
- 22 incidents remained open at the end of the 2023-2024 reporting cycle; these will require further actions in the 2024-2025 permit year.
  - Nine (9) were new incidents
  - 13 were incidents reported during previous reporting periods

32 (67%) of the new investigated discharges were found to be invalid reports (not an illicit discharge) because either the discharge is authorized as per 9VAC25-890-20 D.3 or did not enter the MS4 system. Corrective actions were still taken for 28 of these incidents in the form of spill clean-up, training, investigations, or guidance and they were closed during the reporting cycle. Four (4) of these require corrective actions that are ongoing and as such remain open incidents under the IDDE Program.

17 (33%) of the new investigated discharges were found to be valid reports (potential or actual illicit discharges). Corrective Actions were taken for twelve of these incidents and they were closed during the reporting cycle. Five (5) of these require monitoring and/or corrective actions that are ongoing and as such remain open incidents under the IDDE Program.

IV. REVIEW OF MCM#3 PROGRAM EFFECTIVENESS

For the reporting period, 1 July 2023 – 30 June 2024, Fort Belvoir completed the following actions to maintain compliance with permit conditions of the MS4 General Permit that became effective on 1 November 2023:

- The *U.S. Army, Fort Belvoir, Virginia Illicit Discharge Detection and Elimination Plan* was reviewed and updated, mainly due to the issuance of the new 2023-2028 MS4 General Permit and the beginning of a new permit cycle, resulting in the current plan dated 18 June 2024. During this reporting cycle:

  - All permit references were updated to reflect the new 2023-2028 MS4 General Permit language across the 2024 IDDE Plan.
  - Clarified requirements under the new MS4 General Permit defining the MS4 regulated service area as either the 2020 census urban areas with a population of 50,000 or greater, or urban areas under the 2000 and 2010 decennial census.
    - Since Fort Belvoir's population does not exceed 50,000, the MS4 service area falls under the 2000 and 2010 decennial census.
  - Outfall and SMF data were updated to match the database including creating the new outfall prioritization schedule for each reporting year.
    - Updated total number of outfalls and number of outfalls within the 2010 census urbanized areas from 162 to 166.
    - Updated total number of SMFs from 345 to 384, number of SMFs owned/operated by FBRC from 81 to 108, and number of SMFs owned/operated by Fort Belvoir from 330 to 369.
  - The *Belvoir Eagle* has fully transitioned to an electronic platform and has ceased all hard copy publications, and all references to the newspaper have been removed.
- ORI was conducted on 50 outfalls prioritized for year-1 screening as required under Part I.E.3.c.(2).(c).
- 52 new suspected illicit discharges were investigated, 43 were tracked to completion as required under Part I.E.3.c.(2) – (6), and nine (9) remained open and are awaiting corrective actions. Additionally, 19 incidents from previous reporting periods were followed-up on and nine (9) were closed during the reporting period.
- Windshield inspections were conducted on all eight (8) routes quarterly, for a total of 32 total windshield inspections completed as stated in the Fort Belvoir Illicit Discharge Detection and Elimination Plan.
- A link "Report Stormwater Pollution" was added to the website (Fort Belvoir Environmental Division Webpage) on 27 October 2020 to allow the population on Fort Belvoir to report illicit discharges online anonymously.
  - No reports were received through the online reporting tool during the 2023-2024 reporting period.
- Illicit discharge education for the public is included in the Education and Outreach Plan developed for Part I.E.1.b and Illicit discharge identification and reporting is covered in all levels of worker training and in the written operating procedures developed for Part.I.E.6.
- Four (4) construction projects were completed during the reporting cycle, two (2) of which resulted in changes to the stormwater system. As-builts were used to update information tables for MS4 outfalls and stormwater management facilities (SMFs) as required by Part I.E.3.a.(1) and (2). The updated information tables are presented in Appendix B.
- GIS layers of all identified MS4 outfalls and SMFs will be submitted prior to the 31 October 2025 deadline as required by Part I.E.3.a.(3).

BMPs (BMP 3.1, 3.2, and 3.3) for the Illicit Discharge Detection and Elimination (IDDE) MCM continue to be effective ways to meet permit requirements. The BMPs in the Program Plan call for maintaining an Accurate MS4 Map and Information Table, prohibiting unauthorized non-Stormwater discharges into the MS4 through issuance of a Garrison Policy Memorandum, and implementation of the 2024 IDDE Plan which documents written procedures designed to detect, identify, and address unauthorized non-stormwater discharges. How Fort Belvoir achieved compliance with the measurable goals for MCM #3 based on the Program Plan is discussed below.

BMP 3.1 MAINTAIN AN ACCURATE MS4 MAP AND INFORMATION TABLE

Fort Belvoir developed a GIS-compatible shapefile and information table to meet all requirements listed in Part I.E.3.a.(1) and (2) for all MS4 outfalls and stormwater management facilities (SMFs) during the 2018-2019 reporting cycle and now maintains the data, as necessary. The updated information table will be with all identified MS4 outfalls and SMFs will be submitted prior to the 31 October 2025 deadline.

During the reporting period from 1 July 2023 – 30 June 2024 the following goal is set forth in the Program Plan.

The measurable goal to update the storm sewer system map and outfall information table, no later than October 1 of each year, to include any new outfalls constructed, or TMDLs approved, or both during the immediate reporting period was met.

- AECOM was contracted to manage the MS4 structure database, the GIS-compatible shapefile, and information tables for MS4 Outfalls and Stormwater management facilities. Under contract, AECOM completed updates to these systems as projects were completed and within 30 days of final project closure inspection.
- The information table was updated to account for new MS4 outfalls and SMFs installed associated with two (2) newly completed projects as shown on Table 3.
- The structure database and GIS layers were not updated to account for changes to the system including new, abandoned, and/or retrofitted structures other than outfalls and SMFs.
- The updated information tables with data for these new structures is included in Appendix B.

Fort Belvoir did not encounter any major IT issues to the DPW-ENV website during the 2023-2024 reporting period. One (1) quarterly functionality test was performed on 10 July 2023 and no issues were encountered.

BMP 3.2 PROHIBIT UNAUTHORIZED NON-STORMWATER DISCHARGES INTO THE MS4

Fort Belvoir Policy Memorandum #71, Prohibition of Illicit/Unauthorized Discharges into the MS4 and waterways was an existing policy that prohibited unauthorized discharges into the MS4 as per Part I.E.3.b of the permit. A new Garrison Commander, Colonel David J. Stewart, took command of Fort Belvoir in August 2024 and all policies under previous Garrison Commanders were rescinded and resubmitted, with only the policy number changing for this specific policy. Policy Memorandum #71 has since been revised as Policy Memorandum #25. This information will be reflected again in next year's annual report.

Fort Belvoir Policy Memorandum #73, Stormwater Pollution Prevention Requirements was a former policy that was signed into effect in August 2018 and defined SWPPP requirements for facilities and construction sites and established a Pollution Prevention Team that is responsible for completing facility inspections, maintaining operational compliance, and provided required documentation. A new Garrison Commander, Colonel David J. Stewart, took command of Fort Belvoir in August 2024 and all policies under previous Garrison Commanders were rescinded and resubmitted, with only the policy number changing for this specific policy. Policy Memorandum #73 has since been revised as Policy Memorandum #26. This information will be reflected again in next year's annual report.

Fort Belvoir Policy Memorandum #28, Environmental Policy is not currently in place and was rescinded after the new Garrison Commander, Colonel David J. Stewart, took command of Fort Belvoir in August 2024. This information will be reflected again in next year's annual report.

During the reporting period from 1 July 2023 – 30 June 2024 the following goal is set forth in the Program Plan.

The measurable goal to review and revise Fort Belvoir Policy Memorandums #28, 71, and 73 as needed, to meet new Command goals and obtain Garrison Commander approval and signature to get the required policy in place, was not met.

- Garrison Commander Joseph V. Messina took command of Fort Belvoir on 9 August 2022. The policy memos were not signed by Joseph V. Messina during his two (2) year tenure as the Garrison Commander.

- On 8 August 2024 a new Garrison Commander, Colonel David J. Stewart, took command of Fort Belvoir. Policy memos #71 and #73 were resubmitted and changed to policy memos #25 and #26, respectively. This information will be reflected again in next year's annual report.

BMP 3.3 MAINTAIN AND IMPLEMENT ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PLAN

The 2024 IDDE Plan documents IDDE written procedures designed to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the MS4 and to effectively eliminate the unauthorized discharge.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to review and revise the IDDE Plan, as needed, including adding new outfalls to the screening prioritization list was met.

- The IDDE Plan was reviewed but did receive major updates, resulting in the current plan dated 18 June 2024. During the review, the following was noted as requiring updates but were not done as there has not been a resolution:
    - Policy Memorandum #71 is still the method for prohibiting discharges noted in the IDDE Plan. Additionally, multiple other policies used in the Legal Authority section (#28 and #73) have also gotten caught up in the goal to combine similar policies described above. Once a policy or policies are back in place the IDDE Plan will be updated to reflect the change.
- During this reporting cycle:
    - All permit references were updates to reflect the new 2023-2028 MS4 General Permit language across the entire 2024 IDDE Plan.
    - Clarified requirements under the new MS4 General Permit defining the MS4 regulated service area as either the 2020 census urban areas with a population of 50,000 or greater, or urban areas under the 2000 and 2010 decennial census.
        - Since Fort Belvoir's population does not exceed 50,000, the MS4 service area falls under the 2000 and 2010 decennial census.
    - Outfall and SMF data were updated to match the database including creating the new outfall prioritization schedule for each reporting year.
        - Updated total number of outfalls and number of outfalls within the 2010 census urbanized areas from 162 to 166.
        - Updated total number of SMFs from 345 to 384, number of SMFs owned/operated by FBRC from 81 to 108, and number of SMFs owned/operated by Fort Belvoir from 330 to 369.
    - The *Belvoir Eagle* has fully transitioned to an electronic platform and has ceased all hard copy publications, and all references to the newspaper have been removed.
    - Minor updates were made to each section to ensure information is all up to date.
    - Current outfall and SMF information were included to match the database.

The measurable goal to implement the five-year IDDE plan is inclusive of accomplishing multiple things across the MS4 Program. These actions are broken down to match the major plan sections of Prevention, Detection, and Elimination. The goal to fully implement the plan was partially met.

- **Prevention –**
    - Promoting Good Practices Through Training – was met

        - Illicit Discharge identification and reporting is included in all levels of worker training and in the written operating procedures developed for Part.I.E.6.
        - Key topics and audiences trained included:
            - Identifying potential spills, eliminating, or reducing spill potential, and how to respond when spills occur to Spill Prevention and Response personnel training held on 3 September 2023.
            - Sediment and Erosion Prevention during Pre-construction Trainings held on 9 September 2023, 14 December 2023, 21 December 2023, and 4 January 2024.
            - Proper Material and Waste Management including storage, handling, and disposal to personnel that deal with or have the potential to deal with hazardous materials or waste held on 4 March 2024 and from 3-7 June 2024.
            - Preventative Maintenance to all personnel responsible for maintenance of vehicles, aircraft, equipment, tanks, etc. held throughout the reporting period.
    - Publicize Educational Events, Materials, and Guides – was partially met
        - Facebook Posts were not made regularly and did not meet the goal set in the IDDE plan of at least once per month covering high-priority water quality issues.
        - Articles that were published as described in Table 1 provided a method for contacting the DPW Stormwater Program and how to report illicit discharges.
    - Facilitate Reporting of Illicit Discharge – was met
        - The Fort Belvoir Environmental Division Webpage continued to provide the public contact information where the illicit discharges could be reported.
        - A link "Report Stormwater Pollution" was added to the website in 2020 to allow the population on Fort Belvoir to report illicit discharges online.
            - No reports were received, and only one (1) quarterly functionality test performed on 10 July 2023 of the reporting button occurred during this reporting period.
        - An additional link for "Report a Spill" was implemented on the DPW Environmental SharePoint on 24 May 2023. This button is intended to be an additional means for tenant agencies to be able to report an illicit discharge or spill.
            - No reports were received via the button during this reporting period.
- **Detection –**
    - Maintain Avenues for Direct Notification – was met
        - Direct Notification is how the public and contractors can contact the DPW and report illicit discharges. Reports of this kind can be made through multiple avenues and to any of the personnel within the Environmental office. This allows DPW to appropriate the most qualified team in response to any illicit discharge.
        - 30 of the 52 reported potential Illicit Discharge Incidents investigated during this reporting period were a result of direct notification from other agencies or the public. These are discussed in detail in Part I.E.2.i.(1) of this annual report.
    - Performing Windshield Inspections – was met
        - Windshield Inspections are performed quarterly along eight (8) defined routes, developed in 2019. These inspections resulted in 24 deficiencies being noted in 12 of the 32 inspections completed:
            - Zero (0) erosion and sediment control (ESC) deficiencies
            - 10 good housekeeping deficiencies
            - Six (6) incidents of spills requiring investigation
            - Zero (0) structures identified for maintenance
            - Routes 3, 6, and 7 were identified as the routes with the most issues found
        - All ESC deficiencies were reported to the ESC Inspector for the construction project site and all good housekeeping deficiencies were reported to the facility manager.
    - Dry Weather Screening of 50 outfalls – was met

        - Implementation of the plan involved completion of an ORI of 50 identified outfalls to detect illicit discharges as discussed in Part I.E.2.i.(3) of this annual report. The U.S. Army, Fort Belvoir, Virginia 2023-2024 Outfall Reconnaissance Inventory Final Report is available upon request, a summary of findings for the 50 outfalls screened for the ORI is provided in Appendix D.
            - Two (2) outfalls showed an obvious illicit connection (984 and 2992),
            - No outfalls were considered suspect of an illicit discharge, and
            - Three (3) outfalls were considered a potential for illicit discharge (5050, 6951, and 7272).

- **Elimination –**
    - Illicit Discharge Tracking – was met
        - Illicit discharges are tracked using the IDDE tracker contained within the MS4 Master Tracking Spreadsheet, to organize events via an assigned event number. As discussed in Part I.E.2.i.(5) through (7) a total of 52 new potential Illicit Discharge Incidents were investigated and 71 total Incidents were tracked using this spreadsheet during this reporting period.
        - As required by Part I.E.3.c.(6).(a)-(e), tracking of each incident includes an incident ID, the date discovered, discovery methodology, MS4 structure # affected (if applicable), a description of the event, corrective actions required and taken, validity of the report, notes, status, and date closed. A copy of the tracking spreadsheet for Illicit Discharges is included in Appendix E.
    - Determine sources of Illicit discharge and/or connections – was met
        - Source tracking was completed during the ORI as discussed in Part I.E.2.i.(3) of this annual report. Out of the 50 investigated outfalls for this reporting period:
            - Source tracking was done for seven (7) outfalls which found that:
                - One (1) was found to have ponds/wetland areas upstream that have been confirmed to be the source of suds and biological sheens due to leaf decay. It should be noted that these outfalls were subjected to detergents testing which resulted in a non-detect.
                - Three (3) were found to have pH below the permit benchmark, indicating slightly acidic conditions, however two (2) of the outfalls' investigations were unable to determine a point source for the low pH and is assumed the source is most likely natural due to decaying organic matter, high iron levels, etc. The investigation for the other outfall to determine the source of the low pH is ongoing.
                - One (1) identified presence of diesel range organics, investigation is ongoing to determine the diesel source.
                - One (1) identified an illicit connection from the roof drain to the storm system. Work to fix this illicit connection is ongoing.
                - One (1) identified presence of construction runoff, indicating an illicit discharge carrying sediment into the storm system occurred at a nearby construction project. An investigation is ongoing to determine the source of the sediment-laden runoff.
        - Investigations were completed as discussed in Part I.E.2.i.(5) through (7) on a total of 52 new potential Illicit Discharge Incidents to determine a source for each.
            - 17 of the incidents were found to be an illicit discharge.
        - In addition to efforts by DPW, Fort Belvoir's privatized wastewater/water partner, American Water (AW), also has ongoing efforts to discover any connections of the sanitary sewer to the storm sewer system.
    - Investigate, Assign, and Follow-up on Corrective Actions for each incident – was met

- Methodology for follow up investigations was completed through corrective actions issued for Illicit Discharge Investigations. Out of the 52 Illicit Discharge Investigations completed this reporting period, 40 of them required corrective actions that were issued and verified as completed prior to closeout.
- All deficiencies noted during windshield inspections were recorded in the IDDE tracker and corrective action forms created and issued to the appropriate responsible party. These and other illicit discharge incidents were investigated throughout the reporting period; a summary of each incident investigated, results of the investigation, corrective actions taken, and incident closure date are provided in Appendix E.

D. MCM#4 – Construction Site Stormwater Runoff Control

I. Part I.E.4.a

Describe how the construction site stormwater runoff program is implemented.

Fort Belvoir is a federal entity that has not developed standards and specifications and does not act as a Virginia Erosion and Sediment Control Program (VESCP) authority. All Erosion and Sediment Control (ESC) Plans are reviewed and approved by the VADEQ, and a Construction General Permit (CGP) is required for any project over an acre. Therefore, Fort Belvoir implements a program as per Permit Part I.E.4.a.(4) and inspects all land disturbing activities of 10,000 square feet or greater.

Fort Belvoir utilizes Virginia State Certified ESC/stormwater management (SWM) Inspectors to complete inspections of ongoing projects greater than 10,000 sq.ft.:

- During or immediately following initial installation of erosion and sediment controls,
- At least once per every two-week period,
- Within 48 hours following any runoff producing storm event, and
- At the completion of the project prior to the release of any performance bond.

As Article 2.5 of the Chesapeake Bay Preservation Act under § 62.1-44.15:68 defines who is applicable using geographical locations and does not explicitly state "federal facilities," Army Environmental Command (AEC) has interpreted this to mean that inspections of project sites greater than 2,500 sq.ft. but less than 10,000 sq.ft. is not applicable to Fort Belvoir as a federal facility and has directed Fort Belvoir to omit these sites from the typical inspection schedule. Inspections of these smaller sites are done via the windshield inspections discussed under MCM #3.

Fort Belvoir guides all designers, project proponents, contract specialists, and construction contractors during the Environmental Division project review process and provides limited plan review prior to plans being sent to VADEQ for review and approval. DPW then issues a Land Disturbance Letter (signed by the Director of Public Works) to the construction contractor to authorize start of construction upon receipt of copies of the following documents, as applicable:

- Approved ESC and SWM Plan,
- CGP and approval letters,
- Project-specific stormwater pollution prevention plan (if required),
- Responsible Land Disturber certification, and
- DPW Excavation Permit.

On 15 February 2022, VADEQ correspondence was received stating that any plan submittals from Fort Belvoir, as an MS4 Entity, would be deemed approved by VADEQ without a formal review under a new Administrative Approval process. VADEQ communicated that this new process would require that the owner/operator and the design engineer complete and sign a form certifying that the project is compliant. At this point, the plans "may be administratively approved by DEQ without formal review and approval."

Fort Belvoir requested further guidance from VADEQ and was provided some brief information, including:

"The Administrative Review is an implementation of the laws/regulations which state a plan is approved if no action is taken by DEQ and/or DEQ has not communicated approval or denial within mandated timeframes. The volume of submissions for plan review at times exceeds DEQ's resources for each plan to be reviewed within the

regulatory timeframes; DEQ uses the criteria in the abbreviated review checklist to consider the plan eligible for the administrative review. Staff will review the checklist and if it is complete, and DEQ chooses not to review the plan, it is approved by regulation 45 and/or 60 days after the date of submission."

VADEQ-Northern Regional Office (NRO) stated that they would not be providing stamped and approved plans with Administrative Approval, nor will they be providing the formal approval letters as they had in the past. Only an email stating the plans are approved in accordance with § 62.1-44.15:55 of the Virginia Erosion and Sediment Control Law would accompany said plans.

While Fort Belvoir is an MS4 Entity, it does not currently act as a VESCP or Virginia Stormwater Management Program (VSMP) authority and does not have the infrastructure in place (permitting, plan review, etc.) required under 9VAC25-875 to support this Administrative Approval process as described in February 2022 nor take on the liability, as owner/operator, of certifying that plans are compliant with the requirements. Fort Belvoir finds that overall, this process seemed informal and was not appropriately promulgated and therefore did not implement any major changes to the program in response to this notification. Fort Belvoir did require that the Administrative Approval email from VADEQ be included on the cover sheet of the plans that underwent this process, so it would be kept in the program records.

Fort Belvoir is awaiting the formal promulgated adoption of this Administrative Approval Process by VADEQ and will review future guidance when it comes out to determine if current processes need to be adjusted.

II. PART I.E.4.E.(3). (A)

Confirmation Statement that all land disturbing projects were conducted in accordance with the approved standards and specifications.

As no standards and specifications are developed or approved for Fort Belvoir, annual reporting requirements under Part I.E.4.e.(3).(a) are not applicable.

III. PART I.E.4.E. (1)

Provide the total number of inspections conducted.

A total of 269 inspections were conducted during the reporting period 1 July 2023 – 30 June 2024 for regulated land disturbing activities. 206 inspections occurred at sites disturbing one acre and over, and 63 inspections occurred at projects disturbing 10,000 square feet to less than an acre. No inspections were conducted for non-regulated linear utility projects working under independent standards and specs.

- *Total number of regulated land-disturbing activities:* There were 10 projects which involved 10,000 square feet (sf) and over of land disturbing activity that may have operated under a CGP for the reporting period 1 July 2023 – 30 June 2024.
    - Seven (7) projects involved land disturbance of one acre and greater, all of which required VADEQ issuance of a CGP.
    - Three (3) projects involved land disturbance that was between 10,000 sf and one acre, with only one (1) requiring VADEQ issuance of a CGP.
- *Total number of acres disturbed:* There were 108.11 acres of total regulated (defined as 10,000 square feet and greater) land disturbance during the reporting period 1 July 2023 – 30 June 2024.

IV. PART I.E.4.E. (2)

Provide the total number and type of enforcement actions implemented.

Enforcement actions were initiated on two (2) projects during the reporting period. As a first action, after three repeat violations, an Erosion & Sediment Control (ESC) Warning Letter is issued to the Construction Manager and Contract Officer Representative (COR) for a project. A total of three (3) Warning Letters were issued during this reporting period.

If the ESC Warning Letter did not result in the issues being addressed within one (1) week of issuance, as a second action, a Notice of Non-Compliance Letter was sent to the Construction Manager and COR. No Notice of Non-Compliance Letters were issued during this reporting period.

If the Notice of Non-Compliance Letter did not result in the issues being addressed within one (1) week of issuance, as the third action, an Email Notice of VADEQ Compliance Assistance is issued to the Construction Manager and COR. No Email Notices of VADEQ Compliance Assistance were issued during this reporting period.

In addition to Fort Belvoir's enforcement protocols, VADEQ has project oversight on all construction projects within Fort Belvoir Property. During this reporting period, VADEQ performed seven (7) site inspections at Fort Belvoir.

- Four (4) closeout inspections were performed:
  - The 91st Cyber Facility Project, Construction General Permit #VAR10L559 inspection occurred on 27 February 2024. VADEQ found no violations or issues during the inspection and issued an inspection report recommending the site for permit termination on 29 February 2024.
  - The DLA Ground Fuel Facility Project, Construction General Permit #VAR10N474 inspection occurred on 27 February 2024. VADEQ found no violations or issues during the inspection and issued an inspection report recommending the site for permit termination on 29 February 2024.
  - The Dogue Creek Village Renovations Project, Construction General Permit #VAR10N532 inspection occurred on 20 March 2024. VADEQ noted several deficiencies that needed to be addressed prior to permit termination. These corrective actions were performed, and VADEQ issued an inspection report recommending the site for permit termination on 28 June 2024.
  - The Woodlawn Village Infill ADA Units Project, Construction General Permit #VAR10O153 inspection occurred on 20 March 2024. VADEQ noted several deficiencies that needed to be addressed prior to permit termination. These corrective actions were performed, and VADEQ issued an inspection report recommending the site for permit termination on 28 June 2024.
- Three (3) status check inspections were performed:
  - The American Water Stream Restorations 3, 12, & 13 Project, Construction General Permit #VAR10T060 inspection occurred on 24 May 2024. VADEQ found no violations or issues with the site and issued an inspection report on 30 May 2024.
  - The SM-1 Nuclear Reactor Decommissioning Project, Construction General Permit #VAR10Q713, occurring on 24 May 2024. VADEQ found no violations or issues with the site and issued an inspection report on 30 May 2024.
  - The George Washington Village Stream Restoration Project, Construction General Permit #VAR10S199 inspection occurred on 24 May 2024. VADEQ noted several deficiencies that need to be addressed and the corrective actions are ongoing. VADEQ issued an inspection report on 30 May 2024.

V. REVIEW OF MCM#4 PROGRAM EFFECTIVENESS

For the reporting period, 1 July 2023 – 30 June 2024, Fort Belvoir completed the following actions to maintain compliance with permit conditions of the MS4 General Permit that became effective on 1 November 2023:

- Erosion and sediment control inspections were conducted on construction projects (land disturbance of 10,000 square feet and greater) 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 ESC Plan approval from VADEQ prior to construction commencement.
- Construction projects disturbing an acre or greater of land were required to obtain ESC and SWM Plan approval from VADEQ and obtain a CGP from VADEQ prior to construction commencement.
- All Fort Belvoir ESC and SWM Inspectors maintained certificates of competence in accordance with 9VAC25-875-400.
- Fort Belvoir uses five (5) Technical Bulletins to communicate requirements of the MS4 Construction Site Stormwater Runoff Control Program. The Bulletins are reviewed and revised as needed to account for changes in the program.
- A Pre-Construction ESC/SWM training was provided to all construction contractors working under a CGP and smaller projects that require approval of an ESC plan, prior to commencement of construction either in-person or using virtual training.

All BMPs (BMP 4.1, 4.2, and 4.3) for the construction site stormwater control MCM continue to be effective ways to meet permit requirements. The Program Plan called for publishing of MCM #4 Requirements, Preconstruction Training, Inspections of all land disturbing activities over 10,000 square feet, and the implementation of a progressive compliance and enforcement strategy. How Fort Belvoir achieved compliance with these goals is discussed below.

BMP 4.1 COMMUNICATE THE REQUIREMENTS OF THE STORMWATER PROGRAM

DPW-ENV uses several Bulletins to communicate requirements of the MS4 Construction Site Stormwater Runoff Control Program to government staff, project proponents, designers, and construction contractors. Currently Fort Belvoir utilizes the following Bulletins:

- ***MS4 Program Bulletin #1:*** *Stormwater Management & (ESC) Design, Review, and Plan Approval Procedures for Land Disturbance (last revised 26 July 2023)*
- ***ESC Technical Bulletin #1:*** *Dewatering Operations (last revised 26 July 2023)*
- ***ESC Technical Bulletin #2:*** *Construction Site Stormwater Pollution Prevention Plan Requirements (last revised 26 July 2023)*
- ***ESC Technical Bulletin #3:*** *ESC Requirements for Utility Installation (last revised 26 July 2023)*
- ***ESC Technical Bulletin #4:*** *Stormwater Pollution Prevention Requirements for Small Projects & Renovation Projects (last revised 26 July 2023)*

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to distribute MS4 permit requirements to designers during initial planning phases of construction projects and/or as needed was met.

- DPW Environmental Division distributed MS4 Bulletin #1 to designers for all projects with greater than 2,500 square feet of land disturbance during the project design phase and dig permit reviews. Bulletin #1 references 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 are frequently requested. This bulletin is used to communicate the requirements and process for project approval.
- ESC Bulletins #1-4 cover topics such as: Dewatering Operations, SWPPP Requirements, ESC for Utility installation, and pollution prevention (P2) for small projects or renovations. These are distributed, as needed and applicable, based on the type or size of a project and what operations are involved.
- MS4 Program staff track projects greater than 2,500 square feet during the internal project and excavation permit reviews to ensure that they obtain the proper level of permitting from VADEQ prior to construction commencement.

The measurable goal to review, revise, and post any revised program bulletins on the website within 30 days of updates was met.

- Bulletins were reviewed and revised, as needed; to account for any changes effecting the construction site runoff control program, no changes were made this permit cycle.
- Fort Belvoir maintains each bulletin online on the MS4 Program Webpage under Technical Bulletins on the Fort Belvoir Environmental Division Webpage.
    - Revisions to the Bulletins were last completed on 26 July 2023 to reflect changes in program personnel, and are the current versions posted on the website.

The measurable goal of conducting pre-construction meetings for projects over 10,000 square feet was met.

- Pre-construction Training was provided to four (4) project proponents and trained 20 individuals who initiated construction under a CGP during the reporting cycle from 1 July 2023 – 30 June 2024. All other projects were ongoing from the previous cycle and therefore key site personnel had already received training.
- Smaller projects are instead given copies of ESC Technical Bulletins #1-#4 as applicable.

BMP 4.2 EROSION AND SEDIMENT CONTROL (ESC) SITE INSPECTIONS

Fort Belvoir implements a program as per Permit Part I.E.4.a.(4) and inspects all land disturbing activities of 10,000 square feet or greater. Fort Belvoir utilizes Virginia State Certified ESC/SWM Inspectors to complete inspections of ongoing projects greater than 10,000 sq.ft.

During the reporting period from 1 July 2023 – 30 June 2024 the following goal is set forth in the Program Plan.

The measurable goal of conducting site inspections for 100% of active construction sites that involve land disturbance of 10,000 square feet or greater using certified inspectors was met.

- Two (2) Contracted inspectors, certification #DIN2005 and #DIN1975, from AECOM Technical Services, Inc. (AECOM) were used to perform all construction site inspections.
- Erosion and Sediment Control inspections were conducted once every two weeks and within 48 hours of a storm event that produced greater than 0.50” of precipitation on all construction projects involving land disturbance of 10,000 square feet and greater.
- A total of 269 Erosion and Sediment Control inspections were conducted on Fort Belvoir.
- Four (4) construction projects with stormwater management facilities were inspected periodically during construction to ensure that the new facilities are being constructed in accordance with the approved design plans. Two (2) projects with stormwater management facilities were completed during the reporting year as shown on Table 3.

BMP 4.3 PROGRESSIVE COMPLIANCE ENFORCEMENT STRATEGY

Fort Belvoir has a written compliance and enforcement strategy to ensure that contractors are conducting land disturbance responsibly and in accordance with VADEQ ESC/SWM regulations. This strategy is published in the MS4 Bulletin #1 and covered in pre-construction trainings. Failure to obtain proper permitting and/or non-compliance with ESC minimum standards (9VAC25-875-560) may result in differing levels of enforcement based on the issues noted.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal of implementing the compliance and enforcement strategy when construction contractors fail to obtain proper permitting or have repeat non-compliance findings on bi-weekly ESC inspections on an active construction site was met.

- Enforcement actions were initiated on two (2) projects during the reporting period. A total of three (3) warning letters were issued to the sites after the third repeat violation occurred. After the warning letters were issued, corrective actions were taken and the sites did not incur a fourth repeat violation. Therefore, no Notices of Non-Compliance were issued. The warning letters and inspection violations are available upon request.

E. MCM#5 – Post Construction Stormwater Management

I. Part I.E.5.e.(1). (a) and (b)

Provide the number of privately-owned Stormwater Management Facility (SMF) inspections conducted and the number and type of enforcement actions initiated to ensure long-term maintenance of privately-owned SMFs.

Fort Belvoir has a total of 109 SMFs on record that are privately-owned and operated by Fort Belvoir Residential Communities LLC (FBRC), under a public-private partnership. The FBRC group is responsible for the operations and maintenance at 15 housing areas, or Villages, across Fort Belvoir. FBRC performs their own inspections and maintenance on SMFs and submits summaries to DPW-Environmental. During the 2023-2024 reporting period, FBRC reported:

- Completed inspections of 37 SMFs.
- Performed maintenance on 65 SMFs.
    - 16 bioretention units:
        - Maintenance included annual cleanup, mulching, and erosion control.
        - Two (2) units had missing elements replaced.
    - 13 manufactured treatment devices:
        - Vacuum cleaned all units and replaced filters, repaired cave-ins, and annual cleaning and mulching.
    - 16 underground detention systems:
        - Maintenance included vacuum cleaning the units and repaired cave-ins.
    - One (1) wet pond:
        - Maintenance included mowing and debris/sediment removal.
    - 16 dry extended detention ponds:
        - Maintenance included mowing, debris/sediment removal, erosion control, and repairing cave-ins.
    - One (1) permeable pavement unit:
        - Maintenance included street sweeping and installing a sediment barrier.
- FBRC identified nine (9) additional SMFs during review of the construction plans and field reconnaissance, in addition to the two (2) SMFs discovered during previous reporting periods that still have undetermined MS4 Structure IDs, that were not previously captured in the MS4 database. DPW-Environmental will coordinate with FBRC to assign a permanent SMF ID#, if appropriate, to ensure the newly discovered facilities are entered into the database.
    - ***FV 1***, discovered 2023-2024, a Micro-Bioretention Pond at Fairfax Village, with an undetermined MS4 Structure ID.
    - ***FV 2***, discovered 2023-2024, a Micro-Bioretention Pond at Fairfax Village, with an undetermined MS4 Structure ID.
    - ***BMPs 0001-0007,*** discovered 2023-2024, are Infiltration Trenches at Belvoir Village, with undetermined MS4 Structure IDs.
    - ***BMP 233B***, discovered 2021-2022, a Hydrodynamic Downstream Defender at Cedar Grove Village, with an undetermined MS4 Structure ID.
    - ***SWM 11,*** discovered 2022-2023, an underground ADS StormTech Chamber at Lewis Village, with an undetermined MS4 Structure ID. This SMF was not inspected during the 2023-2024 reporting period.
- No enforcement actions were needed or taken to ensure maintenance of FRBC SMFs.

DPW-Environmental ensures these privately-owned SMFs are inspected at least once every five (5) years to confirm that proper maintenance is being conducted. A total of five (5) inspections were conducted by the Base Operations contractor on behalf of DPW at the FBRC Villages this reporting period. Of the five (5) inspections:

- Two (2) of the SMFs were noted as needing minor maintenance, and none of them were noted as needing major maintenance.

II. PART I.E.5.E. (2)

Provide the total number of inspections conducted on stormwater management facilities owned or operated by the permittee (i.e. publicly owned facilities).

Fort Belvoir has 268 publicly owned and operated SMFs, including two (2) new public SMFs installed or identified during this permit cycle 1 July 2023 – 30 June 2024. These SMFs are within the borders of the Garrison, but 43 of them are outside the MS4 regulated area. Under the Base Operations contract, the contractor, Aleut, is responsible for inspections of all 268 SMFs, and maintenance of 194 SMFs. For the remaining 74 SMFs, maintenance is the responsibility of either Aerospace Data Facility East (ADFE) (seven SMFs), Fort Belvoir Community Hospital (FBCH) (33 SMFs), National Geospatial Agency (NGA) (22 SMFs), or NMUSA (11 SMFs).

When performing inspections Fort Belvoir currently uses a grading system to rate the functionality of each SMF with a '1' rating meaning it is fully functional and an '5' rating meaning it is structurally and/or functionally deficient or inaccessible. Facilities earning a '1', '2', or '3' are considered to have passed the inspection for the year. Facilities found to be rated at a '4' or '5' require significant maintenance or repairs outside of routine activities (mowing, litter, etc.) and will receive a failure until the discrepancies are fixed. A summary of the ratings is provided in Table 4 below.

Table 4: SMF Inspection Rating System

Rating	Status	Description
1	Fully Functional	Structure/facility is not in need of non-routine maintenance and is operating as designed/intended. Continue routine maintenance.
2	Minor Defects	Minor structural or functional defects. Operates to design specifications. Preventative or non-routine maintenance is required. This includes needing mowing or removal or trash and debris.
3	Acceptable	Acceptable/Anticipated Structural and Functional Deterioration. Operating effectively. Preventative or non-routine maintenance required. This includes needing tree or woody growth removal, sediment removal, replanting, mild erosion stabilization, rip rap replacement and minor unclogging.
4	Major Defects	Major structural or functional defects. Preventative or non-routine maintenance is required. This includes needing major erosion repair, complete replanting (including tree boxes with dead trees), severe unclogging, replacement of inappropriate plantings, or replacement of non-functional piping.
5	Deficient	Structurally/Functionally Deficient. In need of immediate replacement or rehabilitation. This rating was given if SMF was completely inaccessible due to vegetation or security and therefore could not be evaluated and if the SMF has completely failed.

During the 1 July 2023 to 30 June 2024 reporting cycle, the Base Operations contractor performed inspections of 225 publicly owned and operated SMFs. The two (2) new public SMFs that were added during the current reporting period were not inspected as they were installed within one (1) year. These new SMFs will ultimately be added to the Base Operations contract and are scheduled to be inspected during the 2024-2025 reporting period.

This brings the total number of publicly owned and operated SMFs inspected during the reporting cycle to 263 out of the 265 total.

The inspection results from 2023-2024 found:

- Nine (9) facilities rated at a '4'
  - Two (2) of these facilities contained dead/missing vegetation that needed to be replaced.
  - Two (2) facilities were exhibiting evidence of gully erosion and exposed soil, the filter media was not functioning properly, and excess sediment and debris needed to be removed.
  - Five (5) facilities were only able to be partially assessed due to the heavy growth of vegetation making it hard to conduct a complete inspection.
- Ten (10) facilities rated at a '5'
  - Five (5) of these facilities were not able to be accessed and assessed due to construction or other activities in the area.
  - Four (4) of these facilities were not able to be accessed because they were heavily overgrown.
  - One (1) facility was unable to be located as the area was covered in dense forest.
- In the previous reporting period, there was one (1) facility rated at a '4' and fourteen (14) rated at a '5'. Any significant maintenance competed is discussed below.

III. PART I.E.5.E. (3)

Provide a description of the significant maintenance, repair, or retrofit activities performed on publicly owned SMFs

Currently, all routine and non-routine maintenance for public SMFs on Fort Belvoir are the responsibility of the Base Operations contractor under an overarching contract which includes the inspection of SMFs as well as regular/significant maintenance as required to maintain functioning SMFs per the General Plan for Stormwater Management Facility Inspection and Maintenance.

Aleut reported maintenance and repairs of varying complexity on 28 public SMFs during the 2023-2024 reporting period. This included:

- Repairs to side slopes due to animal burrows at two (2) SMFs.
- Backfill and stabilization of eroded slopes or other areas at five (5) SMFs.
- Removal of accumulated sediment/debris to restore capacity at 15 SMFs.
- Removal of overgrowth, woody vegetation, and cattails at 13 SMFs.
- Applied additional riprap at two (2) SMFs.

Per discussion with VADEQ on 20 January 2022, Fort Belvoir understands that VADEQ would like an indication of any enforcement taken regarding maintenance of SMFs during the reporting period.

During this reporting cycle, there was one (1) enforcement action taken regarding maintenance of SMFs:

- SMF 3028 had an enforcement action taken against a contractor who had performed work in the area and had caused excess sediment to accumulate within the facility. This SMF is a level 1 micro-bioretention pond and the excess sediment buildup had caused the SMF to not function as designed. A Corrective Actions Report 24-44 was submitted to the contractor and remediation efforts are ongoing.

IV. PART I.E.5.E. (4)

Provide a confirmation statement the SMF information was submitted through the Virginia Construction General Permit (CGP) database for land disturbing activities for which a VPDES permit for Stormwater Discharges was obtained.

All construction work on Fort Belvoir is completed by outside contractors and it is Fort Belvoir's policy that the contractor performing the work acquire their own VPDES CGP for their construction projects. Therefore, Fort Belvoir does not hold any CGPs. All CGP holders are required to submit as-built plans when submitting their Notice of Termination Form to VADEQ. As part of those as-builts, a certification statement as follows is required and is signed and sealed by a PE or licensed surveyor:

"I hereby certify that the stormwater management facilities have been constructed in accordance with the approved plan."

Fort Belvoir hereby certifies that to the best of our knowledge, all SMFs have been entered into the CGP database by the contractors holding CGPs under our established Standard Operating Procedures. Fort Belvoir requires that all projects greater than one acre submit for and obtain a Construction General Permit with VADEQ and assumes that a CGP cannot be closed until all requirements are met. Please see the Fort Belvoir MS4 Program Bulletin #1, available online at the Fort Belvoir Environmental Division Webpage.

V. PART I.E.5.E. (5) AND (6)

Provide a confirmation statement that SMFs were electronically reported using the VADEQ BMP Warehouse per Part III.B.1, 2, and 5 of the MS4 General Permit.

Fort Belvoir plans on entering two (2) BMPs that were brought online during the 2023-2024 reporting period into the BMP Warehouse prior to the 1 October 2024 deadline.

- Two (2) projects, resulting in a total of two (2) structural BMPs were completed during the 2023-2024 reporting period.

Fort Belvoir additionally plans to report BMPs implemented under TMDL Action Plans to achieve nitrogen, phosphorous, and total suspended solids reductions into the warehouse. This should capture the full scope of BMPs used by Fort Belvoir in the management of Stormwater quality and to meet TMDL requirements.

VI. REVIEW OF MCM#5 PROGRAM EFFECTIVENESS

For the reporting period, 1 July 2023 – 30 June 2024, Fort Belvoir completed the following actions to maintain compliance with permit conditions of the MS4 General Permit that became effective on 1 November 2023:

- Required new construction projects to comply with Virginia Stormwater Management Program quantity and quality regulations.
- Required new construction projects resulting in land disturbance equal to or greater than one (1) acre to obtain VADEQ stormwater management plan approval.
- Used a Virginia Certified SWM Inspector to conduct periodic stormwater management facility inspections during construction to ensure that a facility was constructed in accordance with the approved plan.
- Field verification and updates to the Stormwater Structure database and associated information tables for MS4 outfalls and stormwater management facilities (SMFs) were completed throughout the permit cycle with the last update occurring on 28 June 2024. The updates included all Outfalls (zero) and SMFs (two)

brought online and/or identified on 6 November 2023 and 11 June 2024 as required by Part I.E.3.a.(1), (2) and Part III.C.(1) – (10).
- Fort Belvoir conducted inspections on 221 publicly owned and 37 privately owned stormwater management facilities to determine maintenance requirements and ensure efficacy.
- Conducted routine maintenance on publicly owned SMFs located throughout Fort Belvoir.
- Conducted maintenance and repairs of varying complexity on 28 publicly owned SMFs and 65 privately owned SMFs.
- Reported new structural BMPs added during the reporting period and BMPs implemented under TMDL Action Plans to achieve nitrogen, phosphorous, and total suspended solids reductions

All BMPs (BMP 5.1 and 5.2) for the Post-Construction Runoff Control MCM continue to remain effective and meet permit requirements. Implementation of each BMP needs to be evaluated since they are reliant on other entities, such as the Base Operations Contractor, performing their duties. The Program Plan called for conducting inspections and maintenance of SMFs in accordance with the *General Plan for Stormwater Management Facility Inspection and Maintenance*, dated September 2019; reporting new and annual SMFs, inspections, and maintenance to the BMP Warehouse; and coordinating with tenant commands/FBRC to ensure maintenance is completed for privately owned SMFs noted as deficient. How Fort Belvoir achieved compliance with these goals is discussed below.

BMP 5.1 CONDUCT ANNUAL INSPECTIONS AND MAINTENANCE OF SMFS

For post-construction management of SMFs, Fort Belvoir implements an inspection and maintenance program as per Part I.E.5.b. All procedures developed to ensure adequate long-term operation and maintenance of SMFs are documented in *General Plan for Stormwater Management Facility Inspection and Maintenance*, dated September 2019.

In general, all Fort Belvoir SMFs owned or operated by DPW are considered “publicly owned” and are covered under the DPW O&M contract that is valid for five years (2023-2028). Per the contract, these public SMFs should be inspected annually as per Part.I.E.5.b.(3) and are maintained by the O&M contractor. Some Fort Belvoir tenant commands and the privatized housing partner, FBRC, have SMFs that are not owned or operated by DPW. These SMFs are considered “privately owned” and are not fully covered under the DPW O&M contract. These private facilities are inspected by DPW under the O&M contract at least once every five years per Part.I.E.5.c.(1).(a). These separate entities are required to perform their own maintenance of SMFs within their secure facilities/ground lease areas.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to conduct inspections and maintenance in accordance with the General Plan for SMF inspection and maintenance was partially met.

- Within Fort Belvoir’s MS4, there are 119 privately owned and operated SMFs and 268 publicly owned and operated SMFs for a total of 387 SMFs. During the reporting period 258 SMFs were inspected by either the Base Ops contractor, FBRC, or DPW-Environmental.
- The Base Ops Contractor was responsible for implementation of annual SMF inspections at all publicly owned facilities and a quarter of the privately owned facilities as called for in the plan.
    - Operational inspections required by the plan were completed by the Base Ops Contractor using certified personnel for 225 publicly owned SMFs during the reporting cycle.
    - Additionally, the Base Ops Contractor inspected five (5) of the privately owned facilities.

- FBRC was responsible for completing periodic inspections for the privately owned SMFs within their jurisdiction.
    - Operational inspections required by the plan were completed by the FBRC Contractor using certified personnel for 37 SMFs during the reporting cycle.
- All inspections completed by the Base-ops contractor and FBRC during the 2023-2024 reporting period were completed following protocols in the *Fort Belvoir's General Plan for Stormwater Facility Inspection and Maintenance* dated September 2019.
    - Inspections were documented using the forms developed for each type of SMF and contained in the plan.
    - The inspection results for all 225 inspections were then reviewed, and an overall condition rating, as shown in Table 4, was generated for each SMF to assist in prioritizing maintenance. Maintenance for SMFs that received condition ratings of 4 or 5 were prioritized.
        - Three (3) inspections were completed on the same SMF by both the Base Ops Contractor and FBRC.
- The majority, 239 (or 92.6%), of the 258 facilities inspected received a rating of Conditions 1, 2, or 3 where at most they were due for preventative maintenance. Under the Fort Belvoir Base Operations Contract, Aleut must perform routine preventative maintenance on all public facilities that receive a rating of 1, 2, or 3.
- Nineteen (19) (or 7.4%) of the 258 facilities inspected received a 4 or 5 rating and were recommended for non-routine maintenance.
    - All nineteen (19) of these facilities are publicly owned, and based on the Plan and Contract requirements, once an inspection was completed the Base-Ops contractor was responsible for submitting work orders, or Demand Maintenance Orders (DMOs), immediately if non-routine maintenance was required.
- The sequence of inspection to maintenance was not performed as described in the plan due to changes in personnel and misunderstanding of the process. While some maintenance requests were submitted by the Base-Ops contractor, this did not occur for all facilities.
    - One (1) of these facilities had maintenance performed shortly after the inspection to remove vegetative growth and clear debris and trash.
    - Eighteen (18) of the facilities need to have work orders entered for maintenance to occur during the 2024-2025 reporting period. Identified maintenance needs included work such as:
        - Removal of sediment/debris,
        - Removal of woody vegetation,
        - Re-establishment of access,
        - Cleaning of inlet/outlet structures or riprap, and
        - Repair of erosion and stabilization.
- The Inspection and Maintenance plan, inspection and maintenance logs, and BMP location maps are available upon request.
- Fort Belvoir also continuously monitors work requests submitted during previous reporting periods to ensure SMF maintenance is occurring as soon as possible.
    - A total of one (1) historical work request was open at the beginning of the 2023-2024 reporting period.
    - The one (1) work request was completed during the 2023-2024 reporting period
    - No historical work requests remain open for completion during the 2024-2025 reporting period, however, there are work requests that need to be submitted for maintenance work.

The measurable goal to electronically report, by 1 October of each year, all SMF inspection and maintenance completed during the reporting period using the DEQ BMP Warehouse was met.

- Reporting of completed inspections and maintenance for the 2022-2023 reporting period to the BMP warehouse was completed by 21 September 2023.
- Reporting for the 2023-2024 reporting period is scheduled to be completed by 30 September 2024.

The measurable goal to coordinate with tenant commands and FBRC to ensure maintenance is completed for privately owned SMFs noted as deficient was met.

- Fort Belvoir inspects a quarter of the privately owned SMFs during each reporting period and inspects each privately owned SMF at least once every five (5) years to ensure that proper maintenance is being conducted by FBRC.
    - A total of five (5) inspections were conducted by DPW at the FBRC Villages during this reporting period. Of the five (5) inspections, three (3) SMFs were noted as requiring minor maintenance.
    - The Base Ops contractor is required to inspect a quarter of the private facilities annually; however, this was not completed during this reporting period.
- In addition to the SMF inspections conducted by DPW, FBRC contracted Blue Heron Leadership Group, LLC to inspect and maintain SMFs to include detention and/or bio-retention ponds and underground detention and filtration systems located within housing areas operated by FBRC.
    - The FBRC conducted inspections of 37 facilities and performed maintenance and repairs on 65 of the facilities.
    - FBRC supplies DPW-Environmental an after-action report detailing all inspections completed and maintenance conducted as well as a schedule for implementation the following year.

BMP 5.2 MAINTAIN AN ELECTRONIC DATABASE OF SMFS THAT DISCHARGE INTO THE MS4

Part III.B.1 requires Fort Belvoir to maintain an electronic database or spreadsheet of all known SMFs (both public and private) that discharge into the MS4. The database shall also include all Best Management Practices (BMPs) implemented to meet the Chesapeake Bay TMDL load reductions. Fort Belvoir led a large effort during the 2018-2019 reporting period to evaluate available GIS data, review project site plans to incorporate into the database, and field verify structure locations. An updated GIS compatible shapefile and information table will be developed and submitted prior to 31 October 2025 to meet all requirements of Part III.C.(1)-(10).

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to update the database of SMFs within 30 days of a new SMF being brought online, a new BMP being implemented to meet a TMDL load reduction, or an existing SMF being discovered per Part I.E.5.e was met.

- The databases, GIS, and information tables were updated within 30 days for all new facilities brought online during the reporting cycle, with the last update completed on 28 June 2024.
    - Updates were completed to capture all two (2) SMFs brought online on 6 November 2023 and 11 June 2024.
    - A total of two (2) facilities, as shown in Table 3 and Appendix B, were added to the system and assigned new facility numbers during the reporting period.

The measurable goal to electronically report, by October 1 of each year, any SMFs implemented and inspected during the reporting period using the DEQ BMP Warehouse, per Part III.B.1, including SMFs from land disturbance of less than an acre and for which a CGP was not required, was met.

- Updates to the BMP warehouse are planned to be completed prior to the 1 October 2024 deadline.
- Reporting two (2) new SMFs installed during the 2023-2024 reporting period.
- Reporting annual street sweeping completed throughout the installation.

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

I. Part I.E.6.y. (1)

Provide a summary of written procedures developed or modified per Part I.E.6.a and b during the reporting period.

Written procedures for facilities with the potential to impact stormwater have been incorporated into the Fort Belvoir Master Combined ISW and MS4 SWPPP which became effective on 31 March 2017, in the form of BMP Fact Sheets. The Fact Sheets received major updates in 2019 and are reviewed annually to identify any required updates. The Master SWPPP identifies 12 MS4 High Priority Facilities found to have the potential to impact stormwater quality. BMP Factsheets were developed and distributed as a part of the site-specific SWPPPs developed for these facilities.

The BMP Fact Sheets are also distributed on an as needed basis to other individuals and/or tenant commands when issues are noted during inspections or additional guidance is requested. The BMP Fact Sheets make it easy to distribute to various O&M contractors, tenant commands, privatized housing and others performing operations and maintenance functions on Fort Belvoir. Each fact sheet contains a description of the activity, guidelines that identify best management practices for stormwater pollution prevention, any maintenance, if required, and spill response procedures.

When O&M activities not covered under an existing BMP fact sheet are discovered to be contributing to stormwater pollution, fact sheets are developed for a particular activity. During the 2023-2024 reporting cycle these BMP factsheets were reviewed and found to be adequate, with no updates made. The last update to Points of Contact and contact information was made in April 2023. No new BMP Fact Sheets were developed. All current Fact Sheets are available on the Fort Belvoir Environmental Division Webpage under the Programs and Documents. To date, fact sheets have been developed that address the following activities:

- Good Housekeeping
- Spill Preparedness & Response
- Secondary Containment
- Above Ground Storage Tanks
- Outdoor Storage and Handling of Materials and Waste
- Outdoor Storage and Handling of Raw Materials and Waste
- Salt Storage and Loading
- Salt Application
- Aircraft, Vehicle, and Equipment Washing and Degreasing Activities
- Wash Rack Usage Guide (Wall Poster)
- Aircraft, Vehicle and Equipment Fueling
- Aircraft, Vehicle and Equipment Maintenance and Repair Activities
- Waste Handling and Disposal
- Marina Activities
- Fats, Oils and Grease (FOG) Handling
- FOG Management Guide (Wall Poster)
- Firefighting Activities
- Brine Mixing
- Aircraft Deicing Operations
- HVAC Coil Cleaning & Maintenance
- Dewatering Activities
- PCB Awareness
- Outdoor Pressure Washing
- Blasting & Painting Activities
- Landscaping/Ground Maintenance
- Portable Toilets
- Dumpster Management
- Animal Waste

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.

II. PART I.E.6.E. (2) AND (3)

Provide a confirmation statement that all High Priority Facilities were reviewed to determine if SWPPP coverage is needed during the reporting period and a list of any new SWPPPs developed per Part I.E.6.i of the MS4 General Permit.

Fort Belvoir's Combined Master SWPPP for Industrial and MS4 permits was completed and became effective on 31 March 2017. The 2017 SWPPP identified twelve (12) locations that were not covered under a separate permit, and which met the definition of High Priority Facilities (HPFs) as defined in 9VAC25-890-1 or where an illicit discharge has been reported or there is a high potential for spills, leaks, or unauthorized discharges. This included a Motorpool, three laydown areas, a horse stable, a golf cart maintenance facility, the auto skills center, and some dining facilities. These HPFs were each assigned a MS4 HPF Identifier (ID) from HPF-001 through HPF-012.

As required by Part I.E.6.k, HPFs are to be evaluated annually to determine whether a SWPPP is required based on site operations and conditions. Fort Belvoir uses a modified Virginia DEQ No Exposure Certification Form to document exposure conditions at each facility as compared to the evaluation criteria spelled out in permit Part I.E.6.i.(1) – (9). The permit states that if the facility is determined to be a HPF with a ***high potential*** to discharge pollutants, the permittee shall develop a SWPPP meeting the requirements of Part.I.E.6.j no later than 31 December of that same year.

- Based on the evaluations completed during the 2023-2024 reporting period it was determined that six (6) facilities classify as a HPF with the potential to discharge pollutants and eight (8) facilities met all conditions of no-exposure.
- Seven (7) facilities determined to need a SWPPP already had one, and development of a SWPPP for two (2) facilities, HPF-010 and HPF-011 was recommended during the 2023-2024 evaluation.
- Two (2) new facilities, HPF-014 and HPF-015, will be evaluated during the 2024-2025 reporting period to determine if a SWPPP is needed or if they meet the no-exposure criteria.

III. PART I.E.6.Q. (4) AND (5)

Provide a summary of SWPPPs modified per Part I.E.6.j, l, or m or the rationale for de-listing HPFs per Part I.E.6.l or m of the MS4 General Permit.

Overall recommendations from the 2023-2024 HPF evaluation discussed above included continuing the more frequent facility inspections at the Army and Airforce Exchange Service (AAFES) as well as providing additional training/guidance to commercial facilities and distributing informational materials to handout or place around these facilities to educate employees of best management practices (BMPs). Major findings from this year's evaluation that resulted in or will result in SWPPP modifications/closure included:

- One (1) facility, the Golf Course (HPF-001), requires the SWPPP to include the maintenance facility once the ISW permit is closed.
- One (1) facility, the Community Hospital (HPF-010), had previously been noted to have cleanliness issues with the use of a trash compactor and spills associated with the unloading of dumpsters, therefore a SWPPP was issued in December 2020.
    - During the 2023-2024 evaluation, it was deemed necessary to reissue the SWPPP due to a grease spill that occurred in December 2023 by the loading docks.
- One (1) facility, AAFES South Post/Burger King (HPF-011), is required to develop a new SWPPP. The evaluation noted areas where residuals from using, storing, or cleaning industrial machinery or equipment remain exposed to stormwater runoff.
- One (1) new facility, Building 777 Fueling Facility (HPF-014), will be evaluated once operations begin to determine if a SWPPP is needed.

- One (1) new facility, Fire Maintenance Facility (HPF-015), was identified as conducting operations that qualify the facility as an HPF, but it is outside of the 2020 census urbanized area. The facility will be evaluated during the 2024-2025 reporting period to determine if a SWPPP is needed.

Although the evaluation showed that five (5) facilities which currently hold a SWPPP now meet criteria for no-exposure requirements, Fort Belvoir determined that the SWPPP had an impact on facility operations and therefore chose to require the facilities to continue to maintain their current SWPPP to prevent backsliding by facility operators. Table 5 below summarizes the findings, recommendations, and major modifications, if any, made to each HPF SWPPP.

Table 5: HPF SWPPP Modifications, De-Listing, and Justification

MS4 HPF ID	Facility Name	SWPPP Required?	SWPPP Development Status	Justification	Recommendation
MS4 HPF-001	Golf Course (Building 2920)	No	Complete	The site is located outside of the regulated MS4 area and therefore no SWPPP is required. The facility also feeds to grass swales allowing for infiltration before entering a storm pond preventing pollutants from directly discharging to waterways.	**No Major Modifications to SWPPP** Maintain SWPPP to encourage current compliance status. **Note:** Portions of the Golf Course are currently covered under another VPDES permit. This SWPPP may require expansion in the future to cover these areas once the current ISW permit is closed.
MS4 HPF-002A	AAFES PX (Building 2321)	Yes	Complete	The facility currently has a SWPPP, but site has been found out of compliance with requirements even after multiple rounds of training, increased inspections, and Grease Management and Spill Response Guides being posted around Facility.	**No Major Modifications to SWPPP** Change the inspection frequency to annual and maintain routine windshield inspections of the area. Add spill kits and conduct housekeeping checks around dumpsters.
MS4 HPF-002B	AAFES Commissary (Building 2325)	Yes	Complete	The facility currently has a SWPP, but site has been found out of compliance with requirements even after multiple rounds of training and increased inspections.	**No Major Modifications to SWPPP** Maintain quarterly inspection schedule and routine windshield inspections of the area. Must distribute spill kits more efficiently and perform trash cleanups in bioretention units.
MS4 HPF-003	DLA Contract Yard	No	Complete	The facility currently has a SWPPP and has remained compliant with its requirements. Due to the lack of construction currently ongoing, site has had minimal materials.	**No Major Modifications to SWPPP** Maintain SWPPP to encourage current compliance status and to cover any upcoming construction projects.
MS4 HPF-004	AMSA 91 Motorpool (Building 2292)	No	Complete	The facility currently has a SWPPP and has remained compliant with its requirements. The facility is also fitted with an OWS that feeds to sanitary and all runoff is captured by a storm pond preventing pollutants from directly entering waters of the state	**No Major Modifications to SWPPP** Maintain SWPPP to encourage current compliance status.
MS4 HPF-005	Caisson Stables (Building 3045)	No	Complete **TO BE CLOSED IN 2024**	The facility is currently vacant and has not been in use for housing horses since early 2023. The horses have been taken to an off-site facility where a contract for use exists until 2027. Personnel stated that it is unlikely they move back to stables after 2027. All equipment is currently housed within the barn or shed.	**CLOSE SWPPP** **No Major Modifications to SWPPP** Operations ceased and therefore the facility SWPPP will be closed and archived. The Master SWPPP will be updated to reflect Facility Closure.
MS4 HPF-006	Auto Skills Center	No	Complete **CLOSED**	The facility ceased Operations in June 2021 and was vacated in July	**SWPPP CLOSED**

MS4 HPF ID	Facility Name	SWPPP Required?	SWPPP Development Status	Justification	Recommendation
	(Building 1462)		**July 2021**	2021. All materials were removed from the site, which is no longer a self-service auto center and has new management.	Operations ceased and therefore Facility specific SWPPP has been closed and archived. Master SWPPP updated to reflect Facility Closure.
MS4 HPF-007	Theote Road Housing Storage Yard	Yes	Complete	The facility currently has a SWPPP and has remained compliant with its requirements.	**No Major Modifications to SWPPP** Maintain SWPPP to encourage current compliance status.
MS4 HPF-008	Housing Annex (Building 1108)	Yes	Complete	The facility currently has a SWPPP and has remained compliant with its requirements.	**No Major Modifications to SWPPP** Maintain SWPPP to encourage current compliance status.
MS4 HPF-009	Bowling Alley (Building 1199)	No	Not Required	Although grease is managed outside in a dedicated storage location away from any inlets, no spills were noted at the facility and the probability of a spill entering the storm sewer system is low. All conditions of non-exposure were met.	**SWPPP CLOSED** **Continue Training** as prescribed in the Training Plan focused on grease management and outdoor storage requirements.
MS4 HPF-010	Fort Belvoir Community Hospital	Yes	In Progress	Grease is managed outside and a spill associated with the grease management occurred near the loading docks which entered the storm system. No spills associated with the unloading of dumpsters and trash compactors were noted at the facility. The facility is also fitted with multiple structural BMPs including sand filters and storm ponds preventing the direct discharge of pollutants to waterways.	**RE-OPEN SWPPP** **Continue Training** as prescribed in the Training Plan focused on illicit discharges and targeting both Medical and Facilities personnel. **Continue Monitoring** area via windshield inspection route 4.
MS4 HPF-011	Burger King	Yes	In Progress	All grease is managed internally within the facility and pumped out regularly; however, grease residue from a spill was not properly cleaned up and findings revealed improper grease management practices and a lack of employees educated on grease handling. Another spill occurred due to fluids leaking from a forklift and the residual was exposed to stormwater. General housekeeping practices could be improved as multiple unlabeled drums were found. The potential for pollutants to enter state waters is extremely low due to the oil/water/grit separator and infiltration basin available at the site. Additionally, any discharge from the infiltration basin enters an earthen channel over 500 ft long before entering any waterway.	**DEVELOP SWPPP** **Continue Training** as prescribed in the Training Plan focused on grease management. Consider expanding training for connected AAFES shop focusing on spills and outdoor storage.
MS4 HPF-012	Community Club (Building 1200)	No	Not Required	Although grease is managed outside, there is a dedicated storage location away from any inlets. Sheet-flow from the area enters a heavily wooded area and could infiltrate prior to reaching any waterway.	**Continue Training** as prescribed in the Training Plan focused on grease management and outdoor storage requirements. Post grease management and spill response posters, keep performing windshield inspections, add spill kits, and conduct pump-out supervision.
MS4 HPF-013	Precision Auto Tune Up Shop	No	Not Required	Although vehicle maintenance occurs on site, all source material is located under cover. Therefore, all conditions of non-exposure were met.	**Continue Training** as prescribed in the Training Plan focused on preventative maintenance and material management. Continue to perform

MS4 HPF ID	Facility Name	SWPPP Required?	SWPPP Development Status	Justification	Recommendation
					windshield inspections and conduct pump-out supervision.
MS4 HPF-014	Building 777 Fueling Facility	Not Yet Evaluated	Not Yet Evaluated	Operations have not yet begun at the new fuel distribution center. Site will be evaluated once operations begin.	**Evaluate once Facility is Open**
MS4 HPF-015	Fire Maintenance Facility	Not Yet Evaluated	No Yet Evaluated	New facility identified as conducting operations qualify as an HPF, but it is outside of the 2020 census urbanized area. Facility should be evaluated during the next reporting period to determine if a SWPPP is needed.	**Evaluate During the 2024-2025 Reporting Period**

IV. PART I.E.6.Y. (6)

Provide a summary on the status of each turf and landscape nutrient management plan (NMP) as of 30 June of the reporting period including which plans have been approved, submitted and pending approval, and expired.

Approximately 493.48 acres of managed turf were identified for the first year of the five-year MS4 permit cycle (1 July 2023 – 30 June 2028) that are required to be addressed by nutrient management plans. Management Plans are valid for three years. Four (4) NMPs were updated in July and September 2023, which did not include an acreage increase. Table 6 below shows all current NMPs implemented by Fort Belvoir.

Table 6: Nutrient Management Plan Summary

Approval Date	Location	Acreage
30 June 2022	Fort Belvoir Residential Communities Initiative – A (Cedar Grove, Colyer, Gerber, Herryford, Lewis, Vernondale Villages)	61.0 acres
30 June 2022	Fort Belvoir Residential Communities Initiative – B (Belvoir, Jadwin, Fairfax, Park, Rossell Villages)	54.0 acres
2 February 2023	Fort Belvoir Golf Club	232.08 acres
23 July 2023	Missile Defense Agency Headquarters	4.4 acres
26 July 2023	DLA/DCAA Headquarters Complex	33.0 acres
21 July 2023	Fort Belvoir Residential Communities Initiative – C (Dogue Creek, Washington, River, Woodlawn Villages)	70.0 acres
19 September 2023	National Geospatial-Intelligence Agency Campus East	39.0 acres
	TOTAL:	493.48 acres

Under Part I.E.6.u of the new MS4 Permit requirements for NMPs, all plans must be submitted to the Department of Conservation and Recreation (DCR) at least 30 days prior to the plan expiration. Fort Belvoir has two (2) NMPs that are set to expire on 30 June 2025 and will work on the renewal process prior to expiration of both plans which will be reflected on the 2024-2025 annual report.

V. PART I.E.6.Y.(7). (A) - (C)

Provide a list of training events conducted in accordance with Part I.E.6.d of the MS4 General Permit to include: the date of training event, number of employees in attendance, and the objectives and good housekeeping procedures covered.

A total of 397 civilians, military, and contractor employees were trained during the reporting period. Table 7 shows a summary of all training events conducted; training materials and sign-in sheets are available upon request. Complete definitions for levels of training may be found in the *U.S. Army Garrison Fort Belvoir Virginia Stormwater Pollution Prevention Training Plan*, dated April 2023, and are summarized in Appendix F. In general, Level 1 – ISW SWPPP; Level 2 – MS4 SWPPP; Level 3 – General Stormwater Pollution Prevention; Level 4 – Illicit Discharge; Level 5 – Pre-Construction; Level 6 – Corrective Action; Level 7 – Chloride TMDL.

Table 7: Training Event Summary

Date	Organization	Audience	Attendees	Level of Training
7/6/2023	29th Infantry Division	Maintenance Personnel	2	1 & 4
7/10/2023	NGA	Maintenance Personnel	4	1 & 4
7/21/2023	DAAF 12th Aviation Bravo Company	Maintenance Personnel	1	1 & 4
7/26/2023	Golf Course	Maintenance Personnel	2	1 & 4
7/29/2023	JSP/Verizon/Oneida	Maintenance Personnel	4	1 & 4
8/3/2023	Fort Belvoir DPW Personnel	Public Works Facilities Personnel	4	1 & 4
8/3/2023	Meade – Deweese/Smith Brothers	Maintenance Personnel	1	1 & 4
8/7/2023	249th Motorpool - Pohick	Maintenance Personnel	5	1 & 4
9/3/2023	Various – Spill Response Training	Spill Response Personnel	22	4
9/6/2023	ADF-E	Facilities Personnel	2	1 & 4
9/14/2023	AWS Fiber Line	Pre-Construction Training – RLD	7	5
10/16/2023	DAAF Airfield Services	Maintenance Personnel	14	1 & 4
10/16/2023	DAAF 12th Aviation Delta Company	Maintenance Personnel	2	1 & 4
11/22/2023	911th Building 1950	Maintenance Personnel	2	1 & 4
12/4/2023	NGA – Salt Storage	Chloride/MS4	11	2, 3, 4, & 7
12/4/2023	Housing (Residential) – Salt Storage	Chloride/MS4	9	2, 3, 4, & 7
12/6/2023	DLA – Salt Storage	Chloride/MS4	6	2, 3, 4, & 7
12/6/2023	Aleut	Chloride/MS4	42	2, 3, 4, & 7
12/7/2023	ADF-E – Salt Storage	Chloride/MS4	4	2, 3, 4, & 7
12/7/2023	DAAF 12th Aviation Bravo Company	Maintenance Personnel	1	1 & 4
12/7/2023	DAAF OSA-A	Maintenance Personnel	2	1 & 4
12/7/2023	AAFES	Food Service Facilities	1	1 & 4
12/14/2023	AW Stream Restorations 3, 12, & 13	Pre-Construction Training – RLD	5	5
12/21/2023	INSCOM Phase IV	Pre-Construction Training – RLD	6	5
1/4/2024	Burbeck Road Drainage Improvements	Pre-Construction Training – RLD	2	5
1/25/2024	DAAF DCNG	Maintenance Personnel	2	1 & 4
2/1/2024	MS4 HPF-004 AMSA 91 Motor Pool and Maintenance Area	MS4 High Priority Facility	10	2

Date	Organization	Audience	Attendees	Level of Training
2/1/2024	DAAF 12th Aviation Alpha Company	Maintenance Personnel	1	1 & 4
2/7/2024	MS4 HPF-007 and 008 Housing Storage Yard at Theote Road and Annex on 16th Street	MS4 High Priority Facility	3	2
2/8/2024	MS4 HPF-001 Golf Course Club House and Cart Maintenance	MS4 High Priority Facility	2	2
2/8/2024	MS4 HPF-002B AAFES Commissary	MS4 High Priority Facility	1	2
2/14/2024	MS4 HPF-002A AAFES Express and Food Court	MS4 High Priority Facility	4	2
2/14/2024	MS4 HPF-013 Precision Auto Tune-up Shop	MS4 High Priority Facility	1	2
2/14/2024	911th Building 1950	Maintenance Personnel	4	1 & 4
2/15/2024	300 Area - NVESD	Maintenance Personnel	1	1 & 4
2/20/2024	Fort Belvoir DPW Personnel	Public Works Facilities Personnel	1	1 & 4
2/22/2024	LRC TMP Yard	Maintenance Personnel	2	1 & 4
2/29/2024	DAAF NVESD	Maintenance Personnel	1	1 & 4
3/1/2024	MS4 HPF-011 AAFES South Post/Burger King	MS4 High Priority Facility	2	2
3/4/2024	Various – RCRA Refresher 8-Hour	Spill Response Personnel	106	3 & 4
3/6/2024	MS4 HPF-003 DLA Contractor and Laydown Yard	MS4 High Priority Facility	4	2
3/8/2024	DPW Hazardous Waste	Public Works Facilities Personnel	3	1 & 4
3/12/2024	MS4 HPF-012 Community Club	MS4 High Priority Facility	3	2
3/13/2024	MS4 HPF-010 Fort Belvoir Community Hospital	MS4 High Priority Facility	11	2
3/26/2024	249th Engineering Battalion	Maintenance Personnel	2	1 & 4
3/26/2024	Dogue Creek Marina	Recreational Facility Personnel	2	1 & 4
3/27/2024	DAAF 12th Aviation Bravo Company	Maintenance Personnel	1	1 & 4
3/27/2024	LRC Maintenance Building 707	Maintenance Personnel	2	1 & 4
4/2/2024	DAAF Fueling Facility	Vehicle Fueling Operations	1	1 & 4
4/4/2024	DAAF 12th Aviation Charlie Company	Maintenance Personnel	2	1 & 4
4/4/2024	300 Area - NVESD	Maintenance Personnel	3	1 & 4
4/8/2024	MS4 HPF-005 Caisson Stables	MS4 High Priority Facility	1	2
4/11/2024	MS4 HPF-009 Bowling Alley	MS4 High Priority Facility	1	2
4/18/2024	ADF-E	Facilities Personnel	4	1 & 4
4/18/2024	249th Motorpool - Pohick	Maintenance Personnel	1	1 & 4

Date	Organization	Audience	Attendees	Level of Training
4/24/2024	Aleut	Public Works Facilities Personnel	3	1 & 4
4/29/2024	Mosby Reserve Center	Maintenance Personnel	1	1 & 4
5/17/2024	DAAF Fire Station	Fire Department Personnel	1	1 & 4
5/22/2024	JSP/Verizon/Oneida	Maintenance Personnel	7	1 & 4
5/23/2024	DAAF Airfield Services	Maintenance Personnel	6	1 & 4
6/3 to 6/7/2024	Various – RCRA 40-Hour	Spill Response Personnel	26	3 & 4
6/6/2024	DPW Pest Control	Public Works Facilities Personnel	2	1 & 4
6/12/2024	Mosby Reserve Center	Maintenance Personnel	1	1 & 4
6/12/2024	300 Area Marina MCTID	Recreational Facility Personnel	3	1 & 4
6/12/2024	NGA	Maintenance Personnel	4	1 & 4
		TOTAL:	**397**	

VI. REVIEW OF MCM#6 PROGRAM EFFECTIVENESS

For the reporting period, 1 July 2023 – 30 June 2024, Fort Belvoir completed the following actions to maintain compliance with permit conditions of the MS4 General Permit that became effective on 1 November 2023:

- HPF Evaluations were completed to identify facility changes and upgrades at 13 facilities previously identified as having the potential to impact stormwater quality and no (0) new facilities that began operations during the reporting period.
    - Out of the six (6) facilities determined to need a SWPPP, four (4) already had one, one (1) facility, HPF-010, needed to reopen their SWPPPP, and one (1) facility, HPF-011, will have a new SWPPP developed.
    - One (1) facility which formerly had a SWPPP, HPF-005 for the Caisson Stables, was reassessed and determined to meet requirements for SWPPP closure. This facility is no longer in use and is currently utilized as a storage facility.
    - No minor changes were made to Facility SWPPPs to address changes in Personnel.
    - Table 5 summarizes the findings, recommendations, and major modifications, if any, made to each HPF SWPPP.
- Nutrient Management Plans were implemented for 493.48 acres of total managed turf. Three (3) Nutrient Management Plans were updated in July and September 2023.
- MS4 SWPPP, Stormwater Pollution Prevention, Illicit Discharge/Good Housekeeping, and Pre-Construction training was conducted with 142 individuals trained throughout the reporting period.
- The written Training Plan, dated April 2023, was implemented throughout the reporting period and all planned trainings were completed. Minor updates such as updates to staff certifications and changes to operations were made.
  The Training Plan was reviewed, and updates were completed in August 2022 and April 2023, being finalized in April 2023. No revisions were performed during this reporting period.

All BMPs (BMP 6.1, 6.2, 6.3, and 6.4) for the Pollution Prevention/Good Housekeeping MCM continue to remain effective and meet permit requirements. The BMPs for this MCM were reviewed and revised to reflect new permit requirements once the new MS4 permit was issued by VADEQ. The Program Plan called for maintaining BMP Fact Sheets and developing new ones within 90 days of discovering a new activity/operation that may affect

stormwater quality, completion of annual HPF evaluations to determine need to modify or develop SWPPPs, maintenance of NMPs, and to revise and implement the Training Plan. How Fort Belvoir achieved compliance with the measurable goals for MCM #6 based on the updated Program Plan is discussed below.

BMP 6.1 WRITTEN PROCEDURES FOR OPERATIONS AND MAINTENANCE

As there is not one consolidated O&M Division operating on Fort Belvoir, DPW Environmental has taken the approach of developing BMP Fact Sheets that can be distributed to various O&M contractors/tenant commands/privatized housing performing operations and maintenance functions on Fort Belvoir. BMP Factsheets for common operations are used to ensure proper guidance is being provided to assist tenants in making operational decisions that may help minimize exposure to stormwater. Each fact sheet contains a description of the activity, guidelines that identify BMPs for stormwater pollution prevention, any maintenance, if required, and spill response procedures. As described above, Fact Sheets are distributed to key facilities and personnel with a Site Specific SWPPP and are also distributed on an as needed basis when issues are noted during inspections or additional guidance is requested.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to annually review and update BMP Fact Sheets as needed was met.

- BMP factsheets were reviewed, and no updates were deemed necessary.

The measurable goal to develop new fact sheets within 90 days of discovering a new activity/operation that may affect stormwater quality to include information required by Part I.E.6.a was not applicable as no new operations were identified this reporting period.

The measurable goal to distribute and post new and/or updated BMP Fact Sheets on the webpage within 30 days of development was no applicable, as no new and/or updated BMP Fact Sheets were created.

BMP 6.2 WRITTEN PROCEDURES FOR OPERATIONS AND MAINTENANCE

Fort Belvoir completed an evaluation of facilities during the first year (2023-2024) of the new permit cycle (2023-2028) and identified 14 facilities that are not covered under a separate VPDES permit and met the description of HPF defined in 9VAC25-890-1. As required by Part I.E.6.e, all HPFs will be reevaluated for the non-exposure exemption as well as their potential to discharge pollutants annually. Sites that are evaluated to have a high chance to discharge pollutants are assigned a MS4 HPF Identifier (ID), and a facility-specific SWPPP is developed no later than December 31, if one does not already exist.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to implement the facility specific SWPPPs and review and update after any unauthorized discharge, release, or spill was met

- SWPPPs for seven (7) facilities were implemented for at least a portion of the reporting period.
    - No small changes were made to Facility SWPPPs to address changes in Personnel.
    - One (1) facility, the Caisson Stables (HPF-005), was closed for operations, with the evaluation showing the facility met all requirements for SWPPP closure.
- No unauthorized discharges or releases occurred at any HPF during this reporting period. No spills were noted this permit cycle at any HPFs.

The measurable goal to complete the annual HPF evaluation to identify any HPFs that have a high potential for discharging pollutants and develop a SWPPP by December that year was partially met.

- Based on the evaluations completed during the 2023-2024 reporting period, it was determined that six (6) facilities classify as a HPF with the potential to discharge pollutants and eight (8) facilities met all conditions of non-exposure.
- Out of the six (6) facilities determined to need a SWPPP, four (4) already had one, one (1) facility, Fort Belvoir Community Hospital (HPF-010), required the SWPPP to be reopened, and one (1) facility, AAFES South Post/Burger King (HPF-011), required a new SWPPP to be developed.

BMP 6.3 DEVELOP AND IMPLEMENT NUTRIENT MANAGEMENT PROGRAMS

Per Part. I.E.6.p, Fort Belvoir maintains and implements turf and landscape NMPs that have been developed by a certified turf and landscape nutrient management planner in accordance with §10.1-104.4 of the Code of Virginia, for all lands where nutrients are applied to a contiguous area greater than one acre. Fort Belvoir currently has six (6) NMPs that cover a total 261.4 acres in the MS4 service area and one (1) NMP (Fort Belvoir Golf Club) that covers a total of 232.08 acres in the unregulated service area.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to develop new NMPs, as needed, for lands where nutrients are applied to a contiguous area greater than one (1) acre was not applicable as no new areas requiring a plan were identified.

- 100% of all identified managed turf acres currently have a NMP developed.

The measurable goal to review and update existing NMPs every three (3) years, as needed, for the term of the MS4 permit was met.

- Three (3) previously expired NMPs were updated in July and September 2023.

BMP 6.4 IMPLEMENT AND MAINTAIN WRITTEN TRAINING PLAN

The Training Plan enforces the written procedures established in accordance with Part I.E.6.a. and has been written to ensure the following, per Part I.E.6.d:

1. Field personnel receive training in the prevention, recognition, and elimination of illicit discharges no less than once per 24 months,
2. Employees performing road, street, sidewalk, 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 facility maintenance, public works, or recreational facilities shall receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months,
4. Employees working in and around HPFs with a SWPPP shall receive training in applicable site-specific SWPPP procedures no less than once per 24 months,
5. Employees whose duties include emergency response have been trained in spill control and response shall be trained in spill control and response. Emergency responders, such as firefighters and law-enforcement officers, trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan, and

6. Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and 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. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification.

The Training Plan manages certifications for employees meeting the qualification described in (6) above. Spill Response training is provided and documented by the Spill Response Program Manager and Directorate of Emergency Services (DES). As per Part I.E.6.e, documentation of each training event conducted is also kept in the plan and includes the date of the training event, the number of employees attending the training event, and the objective of the training event. The Training Plan will be updated during the 2024-2025 reporting period to reflect the changes in the new 2023-2028 MS4 General Permit. Training records and certifications are available upon request.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to implement the Training Plan was partially met.

- In accordance with the plan, a total of 397 individuals received training on stormwater P2 which included in-person and virtual courses covering P2 topics and illicit discharge reporting, on-site one-on-one training for facilities with SWPPPs, pre-construction training covering ESC requirements, and stormwater general awareness.

HPF Training: Representatives from 11 of the 14 facilities defined to be HPFs (seven facilities had a SWPPP for at least a portion of the reporting period) were trained. Facilities where employees did not receive direct training included:

- Building 2292 Area Maintenance Support Activity (AMSA) 91 Motor Pool (HPF-004) did not receive the required annual training as it should have.

Target Audience Training:

- **DPW Personnel:** Fort Belvoir Directorate of Public Works (DPW) are trained in accordance with requirements specified in the MS4 General Permit. Fort Belvoir is required to provide biennial Level 3 & 4 training to applicable field personnel. All Fort Belvoir DPW employees are usually trained once a year in the recognition and reporting of illicit discharges. DPW personnel were trained this period on 3 August 2023, 20 February 2024, and 12 June 2024.
- **Stormwater Program Team:** All team members performing ESC and/or SWM Inspections maintained active certifications with VADEQ for the entire reporting period.
- **Responsible Land Disturbers (RLDs):** All construction permitted under a Construction General Permit (CGP) must submit RLD certifications to DPW MS4 Stormwater Program Manager prior to the start of the project. All RLD Personnel and other pertinent site employees receive Level 5 training to address erosion and sediment control concerns before construction begins on-site. A total of 20 people associated with three (3) large construction projects received Level 5 – preconstruction training during the reporting cycle.
- **NMP:** The Fort Belvoir DPW Environmental Division Forester maintained Commonwealth of Virginia Department of Conservation and Recreation (VDCR) certification as a Turf and Landscape Nutrient Management Planner in accordance with state requirements effective through 31 August 2025.

- **Pest Management:** The DPW Pest Management Program Manager is certified by the Department of Defense (DoD) in multiple categories through 31 November 2025. The Fort Belvoir Pest management program currently has 38 Virginia Department of Agriculture and Consumer Services (VDACS) certified applicators that were certified throughout the reporting period.
- **Road, Street, and Parking Lot Maintenance:** Fort Belvoir DPW employs one Base Operations and Maintenance contractor who is responsible for all road, street, and parking lot maintenance across the installation including but not limited to: snow removal, deicing, and street sweeping. All Roads and Grounds employees receive a minimum of Levels 3, 4, and 7 of Training. A total of 72 people were trained for Stormwater Awareness Training.
- **Recreational Facilities:** Fort Belvoir Directorate of Family and Morale, Welfare and Recreation (DFMWR) manages several recreational facilities including pools, golf courses, marinas, car washes, restaurants, etc. Personnel from these facilities receive differing levels of training depending on site operations. A total of five (5) employees working or responsible for key aspects of operations at these facilities received a combination of Levels 1, 2, 3, and/or 4 Training.
- **Maintenance and Public Works Facilities Personnel:** To support Fort Belvoir's needs, there are many maintenance and public works facilities across the installation. All employees responsible for operating such facilities are required to receive a minimum Levels 3 & 4 of Training conducted by Stormwater Program Personnel to ensure proper stormwater pollution prevention. These operations include those responsible for vehicle maintenance, fueling, communications, firefighting, and health and safety. A total of 81 people were trained in the category during this reporting period.
- **RCRA Hazardous Waste Handlers:** All industrial hazardous waste generated by garrison tenants (non-family housing residents) is removed utilizing services contracted by Defense Logistics Agency for proper disposal. Four (4) personnel from the Hazardous Waste <90-day facility were trained in Level 1 this cycle. Additionally, 132 employees responsible for management of hazardous waste at satellite accumulation areas across the installation received Level 3 Training. This ensures that those handling hazardous materials and wastes are aware of water quality issues and preventative measures that can be taken at the facility.
- **Spill Response Personnel:** Oil Spill Response and Recovery Training classes are conducted annually at Fort Belvoir and cover Spill Response and Reporting procedures. Pollution Prevention/Illicit Discharge training is provided as a part of the First Responder Awareness Course, for personnel that work in or around fueling and petroleum distribution facilities. A Total of 22 employees received Level 4 training during this cycle.

The measurable goal to review and revise the written training plan, as needed, was met.

- The written Training Plan was last updated in April 2023 and was implemented throughout the permit cycle. The Training Plan was reviewed, and no updates were made during this reporting period.

3. CHESAPEAKE BAY TMDL ANNUAL STATUS REPORT

Fort Belvoir completed updates to the draft *Chesapeake Bay Phase III TMDL Action Plan* on 5 September 2023 and submitted to VADEQ on 28 September 2023 in accordance with Part I.B of the 2023-2028 MS4 General Permit. VADEQ reviewed the Plan and provided comments and requested additional information in a letter dated 29 May 2024.

- The MS4 Program prima facie did not meet the required 40% L2 Reductions: Table 11 in the FY2023 Annual Report documented 901.20 lbs/year of TN, 545.25 lbs/year of TP, and 248,980.31 lbs/year of TSS. These reductions represent 35.4% of the required 40% L2 Reductions for TN, 229.2% for TP, and 135.1% for TSS.
- Ensure the Final Chesapeake Bay Phase III TMDL Action Plan contains all the required elements described in Part II.A.12.b of the MS4 General Permit.
- The Draft Chesapeake Bay Phase III TMDL Action Plan and FY2023 Annual Report contained information that made it difficult to determine whether the MS4 Program fully implemented all projects necessary to meet the 40% L2 Reductions. Ensure the Final Chesapeake Bay Phase III TMDL Action Plan identifies and distinguishes projects which have been fully implemented or completed, and which projects are in planning, design, or construction phases.
- Clearly and thoroughly demonstrate how the MS4 Program intends to comply with state law, regulations, and permit conditions with respect to achieving the Chesapeake Bay TMDL L2 Scoping Run reduction requirements. Failure to achieve the required 40% L2 Reduction requirements may result in additional compliance action.

VADEQ requires these comments be addressed in the Final Chesapeake Bay Phase III TMDL Action Plan no later than 1 November 2024. This plan is currently undergoing revisions and is expected to be posted for public comment in October 2024.

A. PART II.A.14.D. (1) AND (2)

Provide a list of Chesapeake Bay TMDL Action Plan BMPs, not including annual practices, implemented prior to the reporting period and provide a list of newly implemented BMPs including annual practices implemented during the reporting period.

All BMPs being used for Chesapeake Bay credits were reported on the VADEQ BMP Warehouse to include BMPs that were not previously reported and discovered during the reporting period. Fort Belvoir implements Urban Structural SMFs, Stream Restoration, Shoreline Management, and Land Use Change BMPs to achieve the pollutant reduction goals set out in the draft Chesapeake Bay Phase III TMDL Action Plan. The reduction of pollutants of concern (POC) achieved by each BMP type, excluding annual practices, and the number of each BMP type is seen in Table 8 as required under Part II.A.14.d.(1).(a) and (b):

Table 8: Implemented BMPs and Pollutant Reductions During Prior Reporting Period

POC	BMP	BMP Metrics	Reductions Achieved (lbs. /yr.)
Nitrogen	Urban Structural SMFs	206 SMFs	3,504
	Stream Restoration	9 projects	437
	Shoreline Management	2 projects	8.55
	Land Use Change	8 projects	248
Total Nitrogen Reduction Achieved			***4,198***

POC	BMP	BMP Metrics	Reductions Achieved (lbs. /yr.)
Phosphorus	Urban Structural SMFs	245 SMFs	288
	Stream Restoration	9 projects	396
	Shoreline Management	2 projects	6.04
	Land Use Change	8 projects	38
		Total Phosphorus Reduction Achieved	***728***
Total Suspended Solids[1]	Urban Structural SMFs	245 SMFs	296,730
	Stream Restoration	9 projects	88,155
	Shoreline Management	2 projects	29,484
	Land Use Change	8 projects	38,960
		Total Suspended Solids Reduction Achieved	***453,329***

[1] Although formerly required under the 2018-2023 permit cycle, sediment load reductions are no longer a requirement of the current 2023-2028 permit cycle but have been kept in this table as a courtesy.

Fort Belvoir utilizes Street Sweeping as an annual practice BMP in addition to the other four (4) BMPs including Urban Structural SMFs, Stream Restorations, Shoreline Restorations, and Land Use Change. Any newly implemented BMPs, including annual practices, and the estimated reduction of POCs during the 2023-2024 reporting period is seen in Table 9 as required under Part II.A.14.d.(2).(a) and (b):

Table 9: New BMPs, Annual Practices, and Estimated Reductions During 2023-2024

POC	BMP	BMP Metrics	Estimated Reduction – 3rd Permit Cycle 2023-2028 (lbs. /yr.)
Nitrogen	Urban Structural SMFs	2 SMFs	***228.08***
	Stream Restoration	0 projects	
	Shoreline Management	0 projects	
	Street Sweeping	1,317.40 curb lane miles	
	Land Use Change	0 projects	
Phosphorus	Urban Structural SMFs	2 SMFs	***64.58***
	Stream Restoration	0 projects	
	Shoreline Management	0 projects	
	Street Sweeping	1,317.40 curb lane miles	
	Land Use Change	0 projects	
Total Suspended Solids[1]	Urban Structural SMFs	2 SMFs	***92,992.52***
	Stream Restoration	0 projects	
	Shoreline Management	0 projects	
	Street Sweeping	1,317.40 curb lane miles	
	Land Use Change	0 projects	

[1] Although formerly required under the 2018-2023 permit cycle, sediment load reductions are no longer a requirement of the current 2023-2028 permit cycle but have been kept in this table as a courtesy.

As part of the BMP reporting requirements, a signed certification statement is required by the MS4 Program Manager ensuring all new BMPs were electronically reported to the VADEQ BMP Warehouse prior to the 1 October 2023 deadline under Part III.B.5.

"I hereby certify that all new BMPs were electronically reported to the VADEQ BMP Warehouse before the 1 October 2024 deadline."

B. PART II.A.14.E

Provide a statement that credits were acquired, if credits were acquired during the reporting period to meet all or a portion of the required reductions in Part II.A.3, A.4, or A.5 of the MS4 General Permit.

Based on the current draft Chesapeake Bay Phase III TMDL Action Plan dated 5 September 2023, no new credits are required for Fort Belvoir to achieve the required reductions by 2028. There were two (2) SMFs shown in Table 3 brought online or discovered during the reporting cycle that would provide additional credits.

Information on these SMFs is provided in Appendix B and will be uploaded into the BMP Warehouse by 1 October 2024 as required by Part III.B. Additionally, inspections and maintenance completed on all historical SMFs will be uploaded into the BMP warehouse as well.

C. PART II.A.14.G

Provide the progress, using the final design efficiency of the BMPs, towards meeting the required cumulative reductions for total nitrogen and total phosphorus.

The Final Chesapeake Bay TMDL Action Plan concluded that approximately 37,200 pounds of Total Nitrogen (TN), 2,050 pounds of Total Phosphorous (TP) and 1.18 million pounds of Total Suspended Solids (TSS) are loaded into the waterways from Fort Belvoir annually, based on the 2010 Census Urban Area. Although TSS reductions are not required under the 2023-2028 MS4 General Permit, they have been included as a courtesy. Fort Belvoir must reduce nutrient loads by approximately 2,500 pounds of TN, 238 pounds of TP and 184,000 pounds of TSS by the end of the third MS4 permit cycle in 2028.

Fort Belvoir met pollutant load reductions through the use of urban structural SMFs, street sweeping, stream and shoreline restoration, and land use change BMPs.

Implementation of the TMDL Action Plan resulted in the following cumulative reduction of pollutants of concern in the Potomac River Basin:

Table 10: Chesapeake Bay Cumulative Reductions Achieved

Pollutant of Concern	Required Reduction by 2028 (lb/yr)	Cumulative Reduction Achieved* (lb/yr)	Percentage of L2 Reduction Achieved	
			Based on 2009 Land Use	Based on 2023 Land Use
Total Nitrogen	2,543	4,420	187%	**174%**
Total Phosphorous	238	792	255%	**333%**
Total Suspended Solids	184,283	545,915	205%	**296%**
***Note:** The cumulative reductions achieved shown in this table and in the draft 2023 Phase III Chesbay Action Plan use Guidance Memo No. 20-2003.				

The draft Chesapeake Bay Phase III TMDL Action Plan was submitted to VADEQ on 28 September 2023 and includes calculations and reductions achieved through installation of additional SMFs to determine if it would

accomplish the required reduction goals for 2028. Although additional projects are planned, no additional SMFs are required to be implemented to meet the pollutant reduction goals, and the completed/implemented projects have far exceeded the L2 reduction requirements for TN, TP, and TSS.

D. PART II.A.14.H

Provide a list of any revisions made to the Chesapeake Bay Phase III TMDL Action Plan

The Chesapeake Bay TMDL Action Plan underwent a revision from the Phase II to the draft Phase III version. This draft Phase III version re-calculated loads off 2023 conditions for Fort Belvoir and included urban structural SMFs as a BMP within the plan. The plan was additionally updated with all re-verification efforts for stream and shoreline restoration projects and received a general overhaul to incorporate appropriate references for the new permit and requirements. A copy of the plan is available on the Fort Belvoir webpage and by request.

E. PART II.A.14.I

Provide a list of BMPs that are planned for implementation during the next reporting period

Table 11 below shows a summary of BMPs that are planned or will be brought online during the next reporting cycle.

Table 11: BMPs Planned for 2024-2025 Reporting Period

Planned BMPs	Project	Approximate BMP Extent
1 x MTD Hydrodynamic Separator 1 x Bioretention Level 1	ADFE Generator Project	6.54 acres
13 x Bioretention Level 1 9 x Bioretention Level 2 1 x Underground Detention Basin 2 x Green Roofs	FBNA Distribution Center Project	51.24 acres
Monthly Street Sweeping	Sweeping within MS4 Area	1000+ acres

The Action Plan also notes that there are 19 stream restoration projects, which may be implemented during the third permit cycle ending in 2028, that would result in additional reductions:

- Two (2) of the additional stream restorations proposed in the Action Plan (Totten Road and Tracy Loop) have designs approved by VADEQ on 26 September 2017 and are currently awaiting funding.
- Funding was re-directed to the Outfall 015 Project that also includes implementation for the outfall requirements for the regional pond that was installed. The project is currently under design by the U.S. Army Corps of Engineers, Engineering Division.
- Four (4) of the stream restorations proposed in the Action Plan (AW-2, AW-3, AW-4, and AW-6) have had the designs approved and are currently awaiting funding.
- Three (3) of the stream restorations are currently under design (Gillespie and Hurley Roads, 1st and 3rd Streets, and Behind Dewitt).
- Seven (7) of the stream restorations are proposed (Community Club, Patrick Beach, Jackson Loop South, Jackson Loop North, Old Washington Road, Woodlawn Road, and Sharon Lane).
- One (1) stream restoration project for an unnamed tributary to Dogue Creek near George Washington Village had plans approved by VADEQ on 24 November 2021. This project is currently under construction and is expected to be completed during the 2024-2025 permit cycle.
- One (1) stream restoration project, not included in the Chesapeake Bay TMDL Action Plan, for an unnamed tributary to Dogue Creek near Cedar Grove Village had plans approved by VADEQ on 17

January 2024. This project is currently under construction and is expected to be completed during the 2024-2025 permit cycle.

The only BMPs that are required to be conducted and reported annually to maintain the annual load reduction credit is street sweeping and storm drain cleaning. Projected street sweeping for the 2024-2025 reporting period is shown in Table 11 above. Achieved street sweeping credits for the 2023-2024 reporting period is shown in Table 15 below. Storm drain cleaning was performed this year; however, the amount of sediment removed from the drain cleaning was not measured.

F. Review of Chesapeake Bay Phase III TMDL Action Plan Effectiveness

An assessment of the appropriateness of the BMPs that were identified in the Chesapeake Bay TMDL Action Plan and progress towards achieving the identified measurable goals are provided below. The BMPs for implementation of the draft Chesapeake Bay Phase III TMDL Action Plan have been incorporated into the MS4 Program Plan. As goals of the Phase I and Phase II WIPs were found to have already been met by Fort Belvoir, with the final Phase III WIP goals currently being worked towards, the draft Chesapeake Bay Phase III TMDL Action Plan focused on what should be done to maintain current credits and how to achieve the L2 reductions by the end of the 2023-2028 permit cycle. This is reflected in the BMP CHESBAY.1 discussed below.

BMP CHESBAY.1 Chesapeake Bay Phase III TMDL Action Plan Implementation

Based on current calculations in the draft Chesapeake Bay Phase III Action Plan, completed implemented projects far exceeds the L2 reduction requirements for TN, TP and TSS when compared to existing loads based on both 2000 and 2010 Urban Census Data, as detailed in Table 10 above. Therefore, no additional BMPs were necessary to meet pollution load reduction goals and consequently, the Phase III TMDL Action Plan focuses on credit verification and maintenance. Below is a summary of the actual progress made towards achieving the identified measurable goals and a status report of how each goal was met and/or what is necessary to meet the minimum 100% cumulative reduction requirements.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to inspect and maintain all BMPs and address any deficiencies noted during inspections within one (1) year was partially met.

- Reductions achieved through newly implemented BMPs during the 2023-2024 reporting period will be shared on the 2024-2025 annual report as the draft Chesapeake Bay Phase III TMDL Action Plan is currently being updated. 43 BMPs were not inspected during the 2023-2024 reporting period and consequently did not retain their credits. This will be reflected in next year's annual report.
- Fort Belvoir inspected and maintained all SMFs during the 2022-2023 reporting period and took credit for 206 SMFs. Table 12 below displays the reductions achieved from the 39 newly implemented SMFs during the 2022-2023 reporting period. Please see the draft Chesapeake Bay Phase III TMDL Action Plan for a more detailed look at the reductions achieved by SMF type.

Table 12: Credits and Reductions Achieved for New SMFs During 2022-2023

BMP Name/Type	Year Completed	Inspection Date	TN Reduction (lb/yr)	TP Reduction (lb/yr)	TSS Reduction (lb/yr)
10 x Bioretention Level 1	2022-2023	2022-2023	81.06	7.17	5,258.52
1 x Micro-Bioretention Level 2	2023	2023	1.08	0.08	56.70
4 x Dry Extended Detention Hydrodynamic	2022-2023	2022-2023	3.38	0.64	459.16
3 x Dry Extended Detention UDS	2022-2023	2022-2023	13.52	1.28	2,754.96
1 x Dry Swale Level 1	2023	2023	2.10	0.13	124.65
20 x Proprietary Filtering Practices	2022-2023	2022-2023	37.70	4.25	3,750.86
Total Reductions			**138.84**	**13.55**	**12,404.85**

The measurable goal to inspect and verify functionality of the nine (9) stream restoration projects considered in the plan once every five (5) years and address any deficiencies noted during inspections within one (1) year was not met.

- The nine (9) stream BMPs were completed between 2009 and 2019.
- Five (5) stream restoration projects due for reverification during the 2023-2024 reporting period did not receive reverification inspections, and one (1) stream restoration project is due for reverification by December 2024.
    - **Surveyor Road Stream Restoration** – A stream and habitat assessment were conducted on 25 January and 5 February 2019. Field assessments indicated the stream restoration is preventing erosion within the restored area successfully. The project was deemed to be functioning as expected and continued to generate credits for the next five (5) year cycle. The next assessment was due by 5 February 2024 and since the project was not reverified, credits have been lost.
    - **North Area Stream Restoration** – A stream and habitat assessment were conducted on 17 January 2019. Field assessments indicated the stream restoration is preventing erosion within the restored area successfully. The project was deemed to be functioning as expected and continued to generate credits for the next five (5) year cycle. The next assessment was due by 17 January 2024 and since the project was not reverified, credits have been lost.
    - **Hospital West Stream Restoration** – A stream and habitat assessment were conducted on 17 January 2019. Field assessments indicated the stream restoration is preventing erosion within the restored area successfully. The project was deemed to be functioning as expected and continued to generate credits for the next five (5) year cycle. The next assessment was due by 17 January 2024 and since the project was not reverified, credits have been lost.
    - **Herryford Stream Restoration** – A stream and habitat assessment were conducted on 16 January 2019. Additional plantings at Reach 6 were recommended and a work order was submitted to install EC3 matting on the stream bank at Reach 8 where active erosion was observed. Credits were Reach 6 ad Reach 8 were not included and may be awarded during the next assessment. The next assessment was due by 16 January 2024 and since the project was not reverified, credits have been lost.
    - **ADF-E Culvert #3 Stream Restoration** – This project was completed in June 2019 and was due for verification in June 2024. Since the verification was not conducted, credits were lost.
    - **NMUSA Natural Channel Design** – A stream and habitat assessment were conducted on 30 December 2019. Field assessments indicate the stream restoration has successfully prevented erosion within the restored area. The restoration project was functioning as expected and continued to generate credits for the next five (5) year cycle. The reverification of this project is due before 30 December 2024.
- For the next reporting period, ADFE Culvert #3 and NMUSA Stream Restoration are due for verification.

- Two stream restorations for George Washington (GW) Village and AW Stream Restorations 3, 12, and 13 are currently under construction and are set to be completed during the 2024-2025 permit cycle.
- Reductions achieved from the stream restoration projects are summarized in Table 13 below.

Table 13: Credits and Verification of Stream Restoration Projects

BMP Name/Type	Year Completed	Year Verified	TN Reduction (lb/yr)	TP Reduction (lb/yr)	TSS Reduction (lb/yr)
Surveyor Rd Stream Restoration	2009	**Due 2024**	0.00	0.00	0.00
North Area Stream Restoration	2011	**Due 2024**	0.00	0.00	0.00
Meade Stream Restoration	2016	2020	52.13	47.26	10,515.35
Hospital West Stream Restoration	2010	**Due 2024**	0.00	0.00	0.00
Herryford Stream Restoration	2011	**Due 2024**	0.00	0.00	0.00
AW - 5a and 5b Stream Restoration	2017	2022	10.50	9.52	2,118.20
AW – 7 Stream Restoration	2017	2022	22.13	20.06	4,463.35
AW – 8 Stream Restoration	2017	2022	17.59	15.95	3,547.99
ADFE Culvert #3 Stream Restoration	2019	**Due 2024**	0.00	0.00	0.00
NMUSA Natural Channel Design	2019	**Due 2024**	15.75	14.28	3,177.30
Total Reductions			**118.10**	**107.07**	**23,822.19**

The measurable goal to inspect and verify functionality of the two (2) shoreline management projects considered in the plan once every five (5) years and address any deficiencies noted during inspections within one (1) year was not met.

- The two (2) shoreline management projects were completed between 2010 and 2014
- Two (2) shoreline management projects due for reverification during the 2023-2024 reporting period did not receive reverification inspections.
    - **Tompkins Basin Shoreline** – Last verified on 18 December 2018 documenting that the entire 500 linear feet of shoreline was stable and in good condition. The next assessment was due by 18 December 2023 and since the project was not reverified, credits have been lost.
    - **300 Area Shoreline** – Last verified on 6 December 2018 documenting that the 104-foot seawall remained intact but only 98 linear feet of shoreline were adequately protected by the wave screen versus the 196 linear feet that were originally assumed. The next assessment was due by 6 December 2023 and since the project was not reverified, credits have been lost.
- For the next reporting period, both shoreline management projects are overdue for re-verification.
- Adjusted reductions achieved from the Shoreline Management Projects are summarized in Table 14 below.

Table 14: Credits and Verification of Shoreline Management Projects

BMP Name/Type	Year Completed	Year Verified	TN Reduction (lb/yr)	TP Reduction (lb/yr)	TSS Reduction (lb/yr)
Ask Tompkins Basin (500 linear feet)	2010	2018	0.00	0.00	0.00
300-Area Marina (104 linear feet seawall and 98-foot wave screen)	2014	2018	0.00	0.00	0.00
Total Reductions			**0.00**	**0.00**	**0.00**

The measurable goal to implement and document the street sweeping program as specified under the O&M contract was met.

- Sweeping was to be completed monthly based on Technical Exhibit SA2 of the Base Operations Contract that specifies the locations to be swept and from which snow removal is to be completed.
    - The contract specifies 13,000,481 sq.yd. (2,686 ac.) of land that should be swept monthly.
    - During the 2020-2021 reporting period, DPW Environmental calculated that of the total area swept, only 6,376,212 sq.yd. (1,317 ac.) or 49% fell within the regulated MS4 area.
    - Records of monthly street sweeping are available upon request.
- During this reporting period, the Fort Belvoir Operations and Maintenance contractor was able to meet street and parking lot sweeping monthly goals.
- Based on reported data to DPW, street sweeping practices for the 2023-2024 reporting period falls under scenario SCP-4 as listed in Guidance Memo No. 20-2003 which would achieve a removal rate of 6%, 1%, and 3% for TSS, TN, and TP, respectively.
    - Roads, North Lots, and South Lots were swept an average of 12 times.
    - A regenerative sweeper was used each time.
- Fort Belvoir relies on information within the Technical Exhibit for all street sweeping calculations and expects major changes which will require a re-evaluation of swept areas soon. Changes expected to impact the number of acres swept include:
    - Reissuance of the Fort Belvoir Industrial Stormwater Permit VA0092771 which is anticipated to cover less areas of Fort Belvoir effectively increasing the regulated MS4 area.
    - A new Base Operations contract that is scheduled to be awarded in 2025 which may change the frequency and number of areas expected to be swept.
- Table 15 below shows the actual reductions achieved during the 2023-2024 reporting period.

Table 15: Annual 2023-2024 Total Street Sweeping Reductions

MS4 Area Sweeping					
Watershed	**Total Acres**	**MS4 Acres**	**TN Reduction (lb/yr)**	**TP Reduction (lb/yr)**	**TSS Reduction (lb/yr)**
Accotink Creek	2,222.25	1,089.92	183.76	52.97	76,598.71
Dogue Creek	447.86	219.66	37.03	10.68	15,437.53
Potomac River	15.94	7.82	1.32	0.38	549.58
Pohick Creek	0	0	0	0	0
Total Reductions:			**222.11**	**64.03**	**92,585.82**

BMP Assessment: BMP CHESBAY.1 identified in the Program Plan continues to remain effective and meet permit requirements. Fort Belvoir continues to be on track to meet Phase III goals of 100% reduction. The current TMDL Action Plan utilizes urban structural SMFs, stream restorations, shoreline restorations, street sweeping, and land use change BMPs as avenues to obtain and retain credits. Several projects are due to finish during the 2024-2025 reporting period including two (2) stream restorations and the FBNA DC project, which is set to add several new SMFs, and these will be assessed for potential credits.

4. LOCAL TMDL INFORMATION

A. POLYCHLORINATED BIPHENYL (PCB) TMDL

A PCB TMDL Schedule for Implementation was provided to Virginia Department of Conservation and Recreation (VADCR) in a letter dated 30 May 2012. The Final Fort Belvoir PCB TMDL Action Plan was completed in March 2013. This plan was accepted on 16 December 2015 by Virginia Department of Environmental Quality (VADEQ). The plan was reviewed for adequacy and revisions to address site changes and VADEQ comments received in February 2018. An additional three (3) sites were evaluated as a part of the revisions to the Plan. Only one (1) site within the MS4 service area (MP-13) was determined to have potential impacts to surface waters and will be monitored until Virginia's Water Quality Criteria is met.

Updates to the PCB TMDL Action Plan were completed in March 2020. The public comment period involved the posting of the Draft plan on the Fort Belvoir Home Page under Environmental Documents for Stormwater (http://www.belvoir.army.mil/environdocs.asp) on 16 March 2020. A Notice of Availability for the document was:

- Posted on the main Fort Belvoir Facebook page on 16 March and 18 March 2020.
- Published in the Fort Belvoir newspaper, the *Belvoir Eagle*, on 19 March and 9 April 2020.

Fort Belvoir provided for the public comment period to be open until 15 April 2020 allowing for at least 15 days for public comment as required under Part II.A.12. Fort Belvoir DPW did not receive any comments during this period, therefore the Final 2020 PCB TMDL Action Plan was submitted to VADEQ on 28 April 2020. The PCB TMDL Plan has had minor updates to sections and appendices covering sample results and site statuses in May 2021. VADEQ reviewed the Plan and requested additional information in a letter dated 7 March 2022.

- VADEQ requested that Belvoir indicate the effect of Resource Conservation and Recovery Act (RCRA) sites A-23, A-24, MP-11, and MP-13 to the MS4 service area.
- Fort Belvoir responded to the VADEQ request on 28 April 2022 and stated that the effect of each RCRA site on the MS4 is covered in Section 7 of the TMDL plan submitted in 2020. Belvoir noted that section 7 covers all historic PCB sites, many of which are outside of the MS4 area, and therefore, only MP-13 has direct effects to the MS4 area.
- VADEQ concurred and approved the Plan in a letter dated 23 May 2022 but required that Fort Belvoir notify VADEQ staff within 30 days of finding any previously unidentified significant source of PCBs within the MS4 service area.

Additional updates to the PCB TMDL Action Plan were completed in July 2023, due to requested information from VADEQ from the 2021-2022 Annual Report in comment letters.

- In a letter dated 30 January 2023 outlining comments for the 2021-2022 Annual Report, VADEQ requested under the Local TMDL Action Plans to indicate the monitoring plan and actions to be taken to mitigate PCB levels at MP-13. Fort Belvoir submitted responses on 28 February 2023 noting that this was already included in the report and cited the verbiage and tables but will ensure this is more clearly stated for future reports.
- An additional comment letter was received via email on 17 March 2023. VADEQ requested the 15 April 2020 PCB TMDL action plan to be revised to include an updated monitoring and mitigation plan. This was due to an interpretation that annual monitoring at site MP-13 had been discontinued as last reported results were from 29 October 2021. In response, Fort Belvoir completed updates to the PCB TMDL Action plan as requested and submitted to VADEQ on 13 June 2023. This update included additional sampling results for site MP-13 and clearer verbiage to indicate this site was still receiving annual

monitoring and will continue to receive annual monitoring to document the downward trend toward meeting the Water Quality Criterion.
- Final acceptance was received from VADEQ in a letter dated 26 June 2023 indicating that the revised plan is acceptable, with the caveat that the Plan has a disclaimer added to indicate site MP-011 is part of VPDES Permit No. VA0092771. Fort Belvoir completed final edits on 6 July 2023 to include the statement as requested.
- The plan was posted for public comment with a notice on the main Fort Belvoir page on 24 July 2023, and a notice posted to the Fort Belvoir Facebook page on 28 July 2023. Fort Belvoir kept public comment open until 13 August 2023 allowing for at least 15 days for public comment as required under Part II.A.12. The plan was finalized on 22 August 2023 after receiving no comments during the public comment period.

The PCB TMDL Action plan recommended BMPs that can be addressed under the MS4 permit to eliminate and/or minimize discharges of PCBs as well as a sampling plan for outfalls that were identified as requiring monitoring. 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 as follows.

The MS4 General Permit #VAR040093 effective 1 November 2023 requires that the permittee shall update all previously approved local TMDL action plans to meet the conditions of Part II.B.3 - 7 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Initial updates to the PCB TMDL Action Plan occurred in July 2023 and were finalized and submitted to Fort Belvoir on 22 August 2023. Further updates are currently underway.

BMP PCB.1 DISTRIBUTE EDUCATIONAL MATERIALS ABOUT PCBS

PCB fact sheets and brochures were produced as a part of the PCB TMDL Action Plan to include basic information on PCBs, their hazards, identification of PCB containing equipment, and reporting procedures. Additionally, training slides on the PCB TMDL have been developed, highlighting identification, and reporting of possible PCB leaks, and have been incorporated into MS4 training materials.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to annually review and revise, as needed, the PCB educational materials was met.

- Educational materials were reviewed, and contact information provided in brochures was updated when there were changes in phone numbers or emails.

The measurable goal to annually distribute PCB Brochures to outdoor recreation by ensuring it is posted at trail heads and by maintaining posting on iSportsman Website was met.

- PCB Brochures, *The Dangers of PCBs, and How You Can Help: Learn how you can protect Yourself, your Family, and the Environment*, continue to be posted at six (6) environmental kiosks to provide information to hikers and hunters on how to identify and report potential PCB containing equipment (i.e. old transformers), especially in remote areas of the installation.
- The brochure *PCB Safety and Awareness* remains available online in the iSportsman website. The iSportsman website is the access portal for hunting, fishing, and watercraft recreation at Fort Belvoir. The

fishing page displays the brochure to make fishermen aware of PCBs and fish consumption. Each license application is an opportunity for the public to interact with the brochure.

BMP PCB.2 IMPLEMENT PCB SAMPLING PLAN

The PCB TMDL Action plan included sampling at two outfalls associated with one historic PCB site, referred to as the Warren and Theote Road Laydown Area (MP-13), that was found to discharge into the MS4 system. The sampling plan calls for stormwater runoff monitoring annually until Virginia Water Quality Criterion (WQC) for tPCB based on human health risks (640 ρg/L) are met for at least two sampling events or the site reaches RCRA closure. Additional historic PCB sites (A24a, MP-11, MP-12, MP-13, and MP-14) were evaluated but found to be in areas covered under a separate permit or do not have the potential to discharge to the MS4.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to implement the sampling plan for MP-13 throughout the five-year permit cycle to monitor progress towards meeting water quality criteria at the site was met.

- MP-13 underwent a RCRA facility investigation and was found to meet requirements for No Further Action (NFA) under RCRA and received concurrence from VADEQ on 12 August 2021 but must maintain land use controls. The PCB GIS Layer will be updated to reflect new site status.
- Stormwater Sampling was last completed at MP-13 on 9 January 2024. Runoff from the area continues to be over WQC goals as summarized in Table 16 below.
- Sampling of the Warren-2 site was conducted during the 2023-2024 permit cycle on 9 January 2024 and received results on 16 February 2024 and is summarized in Table 16 below.
- It is believed that PCB laden sediment still exists within the culvert pipe where samples are taken at Warren-2. Sampling of surface soils within earthen conveyance channels and streambed sediment on the receiving water side of the site are planned to determine the extent of PCBs still present and available for transport to surface waters. A remediation project may be a follow on depending on the sampling results.
- Fort Belvoir intends to continue annually sampling and monitoring the site to document downward trend toward meeting the WQC and will request funds for capping and/or complete remediation to include redevelopment.

Table 16: Summary of tPCB Sampling at MP-13

Sample Date	Warren-1 tPCBs (ρg/L)	Warren-2 tPCBs (ρg/L)	WQC for tPCBs (ρg/L)
8/7/2017	**692**	**2,468**	640
1/24/2019	**495**	**10,456**	640
5/22/2020	**11**	**39,526**	640
10/29/2021	-	**2,421**	640
3/17/2022	-	**22,415**	640
1/9/2024	-	**6,181**	640

The measurable goal to monitor remediation efforts and status for active RCRA sites (A24a, MP-11, MP-12, and MP-14) until site closure is reached was met.

- Sites A24a, MP-11, MP-12, and MP-14 all underwent a RCRA facility investigation.

- The RCRA Facility Investigation (RFI) Report Addendum for site A-24 was submitted to VADEQ on 17 April 2020 and subsequently approved by VADEQ on 11 June 2020. The site will undergo additional corrective actions once the characterization study is completed. Sampling was done in the ephemeral creek bed and identified "hot spots" in the drainage swale from the site leading to Accotink Bay. These are slated to be removed once plans have been approved by VADEQ, by 2026.
- Sites MP-11, MP-12, and MP-14 were found to meet requirements for NFA under RCRA and received concurrence from VADEQ in a letter dated 12 August 2021. All three sites were closed under RCRA, with the MP14 site to be redeveloped under an upcoming military construction (MILCON) project.
- The PCB GIS layer will be updated to reflect new site statuses during next permit cycle.

BMP PCB.MP13 MAINTAIN VEGETATIVE CAP AT HISTORICAL PCB SITE MP-13

In 2019 the Restoration Program completed an Interim Soil Removal at the Warren and Theote Road Yard (MP-13). The removal included the disposal of a large soil stockpile at the middle of the site, disposal of concrete debris across the site, and the disposal of the top six (6) inches of soil from across the site. Following the removal, the site was regraded and stabilized to be a fully open grassed recreational area. Site investigations have shown that the regrading and stabilization of the site has led to less runoff and more infiltration. It is anticipated that the restoration of the site and its vegetative cover will encourage a downward trajectory of PCBs being transported in stormwater towards meeting the WQC.

The measurable goal to monitor the site for erosion and bare areas periodically through the windshield inspections completed under MCM #3 was met.

- The site is monitored under the IDDE Program through windshield inspection route 5.
- During the reporting cycle no issues with soil deposition or erosion was noted at MP-13 and therefore, no corrective actions were implemented.
- The soil cap appeared to limit transport of PCBs evidenced by the substantial drop in tPCB detected in sampling results between May 2020 and October 2021, however, results from the most recent testing in January 2024 still indicated high levels. It is believed that there may still be PCB laden sediment located in the culvert pipe where samples are taken for Warren-2, and additional sampling activities are planned.

BMP Assessment: BMPs (BMPs PCB.1, PCB.2, and PCB.MP13) identified in the approved PCB TMDL Action Plan continue to remain effective and meet permit requirements. As mentioned above the actions taken have resulted in fluctuations in detectable tPCB being carried in stormwater off the site. Sampling planned in the conveyance channels and streambed sediment will be used to determine any further actions that should be taken. Fort Belvoir intends to continue sampling and monitoring the site and in the long term will request funds for capping and/or complete remediation to include redevelopment as appropriate.

B. BACTERIA TMDL FOR THE LOWER ACCOTINK CREEK

The Bacteria TMDL for the Lower Accotink Creek Watershed was issued in September 2008. A Fort Belvoir Bacteria TMDL Action Plan was developed and submitted on 30 September 2016 for VADEQ review and approval. VADEQ requested additional information on the action plan on 10 November 2016 and received Fort Belvoir's response and updated action plan on 7 December 2016. The Action Plan was submitted in accordance with Section I.B of the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). The Action Plan was approved and became an enforceable part of the Program Plan on 9 December 2016.

The Bacteria TMDL Action Plan was updated in 2020 and underwent a public comment period after the Draft Plan was posted to the Fort Belvoir Home Page under Environmental Documents for Stormwater on 18 March 2020. The Notice of Availability was also published in the Fort Belvoir newspaper, *The Fort Belvoir Eagle*, on 19 March and 9 April 2020. Fort Belvoir provided for the public comment period to be open until 15 April 2020 allowing for at least 15 days for public comment as required under Part II.A.12. Fort Belvoir DPW did not receive any comments during this period therefore, the Public Comment Section was the only section updated prior to submittal of the Final 2020 Bacteria TMDL Action Plan for the Lower Accotink Creek to VADEQ due on 8 April 2020.

VADEQ reviewed the Plan and requested additional information in a letter dated 7 March 2022.

- VADEQ stated that the TMDL action plan must clearly identify the significant sources of the pollutants of concern discharging to the MS4 not covered under a separate VDPES permit.
- Fort Belvoir responded to the VADEQ request on 28 April 2022 and stated that Fort Belvoir fully assessed all known bacteria sources in Section 4 of the TMDL plan submitted in 2020.
- VADEQ and Fort Belvoir had a conference call on 2 May 2022 to further discuss the significant sources that are discussed in the plan and where VADEQ believed the assessment was lacking.
- A follow-up response was submitted to VADEQ on 18 May 2022 which detailed the additional potential bacteria sources that may occur during a sanitary sewer failure occurring within the area covered by the TMDL which would include two (2) facilities, NMUSA and DLA.
    - Fort Belvoir acknowledged that potential breaks or leaks in the sanitary sewer laterals coming from these facilities may be a potential source of bacteria. This source was not considered to be significant as the lines are owned and operated by American Water and the installation has set communication plans and processes in place to immediately address any potential breaks, leaks, and/or overflows.
- VADEQ concurred and approved the Plan in a letter dated 23 May 2022.

The MS4 General Permit #VAR040093 effective on 1 November 2023 requires that the permittee shall update all previously approved local TMDL action plans to meet the conditions of Part II.B.3 - 7 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Initial updates to the Bacteria TMDL Action Plan for the Lower Accotink Creek occurred in July 2023 and were finalized and submitted to Fort Belvoir on 24 August 2023. Further updates are currently underway.

An assessment of the appropriateness of the best management practices that were identified in the Bacteria TMDL Action Plan for the Lower Accotink Creek Watershed and progress towards achieving the identified measurable goals are as follows.

BMP BAC.1 BACTERIA TMDL ACTION PLAN REVISION AND REPORTING

The Action Plan called for DPW Environmental to review proposed projects and actions and consider potential bacteria sources for any occurring within the Lower Accotink Creek Watershed. If any actions are found to be a

potential source of bacteria to the watershed, DPW would ensure that proper control measures/strategies are selected and implemented as required by Part II.B.4.b and detailed in Table 5 of the MS4 General Permit (Appendix A).

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to update the Action Plan as needed to include new sources and controls was met.

- Projects were reviewed and none were found to pose any additional bacteria sources therefore, no revisions were made to the plan.
- It should be noted that a previously unidentified septic tank was discovered in July 2022 due to a high-water alarm and was reported to DPW which is performing investigations and tracking under the IDDE program.
    - The tank is scheduled to be pumped out and long-term plans are being made to remove it and connect the building to the sanitary sewer
    - Septic tanks were not considered a source of Bacteria in the current plan because none were previously documented to have existed on post.
    - Due to this finding, the Bacteria TMDL Action plan underwent an initial update in July 2023 and was finalized and submitted to Fort Belvoir on 24 August 2023. The septic tank is located at the Fort Belvoir Golf Course Maintenance Facility near Swank Road and Beulah Street. AW personnel will work to verify the tank level quarterly until an accurate fill rate can be estimated. The tank will be pumped out regularly and long-term plans are being made to connect the Golf Course Maintenance Facility septic system to the sanitary sewer system and ultimately remove the tank.
    - Fort Belvoir is currently working to develop a procedure to surveil septic systems within the installation boundary, to include adding any additional discovered systems when found. The septic system surveillance procedures will be developed and implemented by 1 January 2025 and will be reflected in next year's annual report.

BMP BAC.2 INCORPORATE BACTERIA TMDL INFORMATION INTO MS4 TRAINING PROGRAM

The Action Plan recommended BMPs that can be implemented under the MS4 permit to eliminate and/or minimize discharges of bacteria sources to the Lower Accotink Creek Watershed. The focus of the BMPs selected for implementation are operational controls and involve educating Fort Belvoir tenants, partners, employees, and residents in the bacteria water quality issue and what their role is in mitigating and reporting.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to include information on the Accotink TMDL, common sources of bacteria, and strategies for bacteria reduction into Training Levels 1, 2, 3, and 5 was met.

- The Training Plan identifies seven (7) levels of training at different magnitudes of content with Level 1 being the most extensive. Bacteria TMDL information was included and presented in Training Levels 1 and 2 materials with a primary focus on grease since this is currently the most pressing contributor for sanitary sewer overflows (SSOs).
- Due to a shortage of personnel, only Training materials for Levels 1 and 2 were able to be updated to incorporate the Bacteria TMDL information discussed above. The other levels of training were not updated during this reporting period and are planned to be updated during the 2024-2025 reporting period.

- Although not all levels of training were updated, Levels 1 and 2 are presented in most of the training courses held, as shown in Table 7.
    - Even though not all training covered the information, the program was still able to reach 151 people across 53 separate training sessions.

BMP BAC.2 PUBLIC EDUCATION AND OUTREACH

The Public Education and Outreach Program's main goal is to inform civilian and military personnel, residents and contractors about the steps that can be taken to reduce stormwater pollution to the maximum extent practicable (MEP). Due to this TMDL, bacteria is listed as one of the high priority stormwater issues identified in the Public Education and Outreach program discussed under MCM #1.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to publish one article annually that discusses the bacteria water quality issue, sources of bacteria, reporting information and steps that can be taken to reduce bacteria sources was met.

- As of 15 April 2021, the *Fort Belvoir Eagle* is no longer being published in a hard copy format but continues publication online. Fort Belvoir will continue to periodically publish articles in the online version of the newspaper, but in general the Education and Outreach program has switched its focus toward publishing guest articles on the Fort Belvoir Resident Newsletter to meet these and other outreach requirements as of the 2023-2024 reporting period.
    - Fort Belvoir published four (4) articles in the resident newsletter with one (1) article on 27 June 2024 specifically focused on pet waste, bacteria, and stormwater.
    - Housing distributed an article that focused on cleaning up and disposing of pet waste on 27 June 2024. DPW environmental will continue to coordinate with the housing group to have articles published in their Newsletters and distributed directly to residents and will ensure that at least one (1) article focusing on the Bacteria TMDL is published during the 2024-2025 reporting period.

The measurable goal to distribute Pet Waste brochures throughout the housing communities and at facilities operated by the Directorate of Moral, Welfare, and Recreation (MWR) was not met.

- Pet waste brochures "*Are You Cleaning Up After Your Pet?*" normally handed out during events were not used this reporting period.
    - The brochures were previously provided to MWR to be maintained and distributed in key recreational areas such as the Travel Camp where visitors and their families vacation with their pets. Due to change in staff and staff shortage that occurred during this reporting period, brochures were not made available at these locations. DPW Environmental will coordinate with MWR to provide copies of applicable brochures for posting and distribution for the 2024-2025 reporting period.
    - The Pooch Plunge, an event held by housing in September, is the main opportunity for DPW Environmental to reach the target audience for this brochure as pet owners visit the pools for one final swim prior to the end of pool season. DPW-Environmental was unable to coordinate attending this event and will coordinate with the housing group to participate in the upcoming event for the 2024-2025 reporting period.
- Although the brochures were not directly distributed, The Villages at Fort Belvoir requires all pets to be registered and all pet waste to be collected and removed promptly. This is outlined in "The Villages at Fort Belvoir Resident Responsibility Guide" that all residents receive as part of the moving in process.

BMP Assessment: BMPs (BMPs BAC.1 – BAC.3) identified in the approved Bacteria TMDL Action Plan continue to remain effective and meet permit requirements even though shortcomings were encountered during the reporting period. The Bacteria TMDL Action Plan and Training Plan will be reviewed and revised in accordance with the BMPs above to better achieve the goals in future reporting periods.

C. CHLORIDE TMDL FOR THE LOWER ACCOTINK CREEK

The Accotink Creek Chloride TMDL was approved by the State Water Control Board (SWCB) on 12 April 2018 and approved by the Environmental Protection Agency (EPA) on 23 May 2018. The Lower Accotink Creek Chloride TMDL Action Plan was completed as per Part II.B of the 2018- 2023 General Permit, which requires that the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II.B.3 - 7 as applicable no later than 30 months after the permit effective date. This Lower Accotink Creek Chloride TMDL Action Plan allowed for a public comment period by being posted on the Fort Belvoir Home Page under Environmental Documents for Stormwater in April 2021. A Notice of Availability for the document was:

- Posted on the Fort Belvoir Home Page on 7 April 2021.
- Posted on the Fort Belvoir Environmental Facebook page on 8 April 2021.
- Published in the Fort Belvoir newspaper, the *Belvoir Eagle* on 15 April 2021.

Fort Belvoir provided for the public comment period to be open until 30 April 2021 allowing for at least 15 days for public comment as required under Part II.B.7. Fort Belvoir DPW did not receive any comments during this period therefore, the Public Comment Section was the only section updated prior to submittal of the Final 2020 Chloride TMDL Action Plan for the Lower Accotink Creek to VADEQ due on 1 May 2021.

VADEQ approved the Chloride TMDL plan as is, with the adjusted targeted reduction values, in a letter dated 25 February 2022 and recommended:

- Removal of de-icing materials from affected roads and parking lots when they are no longer necessary to avoid an adverse impact to waterways. i.e. sweeping post storm.
- Fort Belvoir will take this into consideration during the annual post season assessment and will update the Plan accordingly.

The plan was undergoing revision in June 2023 and was finalized on 12 July 2023. It was posted for public comment on the Fort Belvoir Environmental Website on 24 July 2023, and a notice posted on the Fort Belvoir Facebook page on 28 July 2023. Fort Belvoir left the comment period open until 13 August 2023, allowing for at least 15 days for public comment as required under Part II.B. Fort Belvoir received one comment from this period and provided a response as follows:

- Comment: Please post all appendices for comment, especially Appendix G which includes copies of annual evaluations. There are currently no changes noted in the strategy or implementation scheduled based on annual assessments. What steps has Fort Belvoir taken and what has been achieved in the past two years of implementation?
- Fort Belvoir Response: The Fort Belvoir Environmental Webpage has limited storage and appendices to the Chloride TMDL cannot be posted but are available upon request as stated on the Fort Belvoir Environmental Division Webpage. Sections 4 and 5 detail the program evaluation and actions taken to the meet the implementation schedule. During the past two years of implementation, a calibration protocol was established for the Base Operations contractor, educational outreach was distributed to base tenants on proper salt management, BMP Fact Sheets were posted on the environmental division webpage specifying proper salt application, and Chloride specific training occurred at the facilities covered under this TMDL as well as corrective actions to address any deficiencies.

The overall goal of this Action Plan would be to achieve reductions using the adaptive iterative approach as recommended in the Virginia Salt Management Strategy, or SaMS. To accomplish this, a program evaluation for current processes and practices; baseline and target application rates; salt storage practices; and training, education, and outreach was completed. Based on the initial assessment of practices in place, the plan then

provides recommendations for improvement and a method for conducting assessments annually to determine the efficacy of the program and to refine operations.

The Action Plan also recommended BMPs identified in the Virginia SaMS that can be implemented under the MS4 permit to eliminate and/or minimize discharges of chloride sources to the Lower Accotink. The recommendations were made based on the baseline assessment completed in 2021 of operations as well as a quantitative assessment of application data collected between 2017-2020. As the plan itself is based on only this initial assessment, annual assessments shall occur to determine efficacy of the program and implemented BMPs in meeting specified limits through an iterative process.

The MS4 General Permit #VAR040093 effective on 1 November 2023 requires that the permittee shall update all previously approved local TMDL action plans to meet the conditions of Part II.B.3 - 7 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Initial updates to the Chloride TMDL Action Plan for the Lower Accotink Creek occurred in June 2023 and were finalized and submitted to Fort Belvoir on 22 August 2023. Further updates are currently underway.

An assessment of the appropriateness of the best management practices that were identified in the Chloride TMDL Action Plan for the Lower Accotink Creek Watershed and progress towards achieving the identified measurable goals are as follows.

BMP CL.1 CONTINUED MAINTENANCE OF EXISTING PROGRAMS

Fort Belvoir has implemented and maintains several programs focused on training, education, and outreach. The initial assessment completed in 2021 when developing the Chloride TMDL Action Plan found that the strategies outlined under the Training (MCM #6), Education, and Outreach Programs (MCM #1 and MCM #2) have been effective at keeping salt usage at a minimum across Fort Belvoir. As the aspects of the current program have shown to be effective, continued maintenance to these programs and processes should remain in place.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to maintain existing MS4 program portions that were found to be effective in minimizing discharges of chloride was met.

- The Education and Outreach Plan outlines specific POCs to be targeted for educational materials, of which chloride is included.
- Chloride is the targeted POC in December for housing residents, military personnel, and civilian personnel through a published article. It is also targeted in January for Military personnel and civilian personnel through a Stormwater Newsletter. Posting on the Fort Belvoir Environmental Facebook page focuses on Chloride as the targeted POC in winter months. This includes tips and tricks for winter storage and application to directly engage the public.
    - A Winter article *Winter Weather and Watershed Health* was distributed on 21 December 2023 and covered harmful effects of road salt on local streams, basics of chloride and how pollution occurs, oil and fuel spill prevention when using snow blowers, and provided tips for minimizing chlorides in stormwater runoff by using shoveling, sweeping, and proper application/storage.
- Fort Belvoir has several written procedural BMP Fact Sheets that are all posted publicly and widely distributed throughout the installation to pertinent tenant operations. While these fact sheets cover a variety of information, there are four that are specifically related to chloride products.
    - BMP Factsheet 4 – Salt Storage and Loading
    - BMP Factsheet 5 – Salt Application
    - BMP Factsheet 13 – Brine Mixing

    - BMP Factsheet 14 – Aircraft Deicing Operations
- Continuing the HPF SWPPP maintenance requirement under MCM #6 provides an avenue for monitoring and controlling sites that are more likely to discharge chloride due to storage activities. Fort Belvoir monitors and trains several HPFs due to their salt storage activities.
    - HPF-003, 007, and 008 are known areas where salt storage occurs.
- The Current training plan, dated April 2023, includes TMDL Information as well as salt management practices. Storage and handling are specifically covered in both the ISW and MS4 SWPPP Training, as well as the General Stormwater Pollution Prevention Training.

BMP CL.2 REVISION OF PRACTICES AT DEFENSE LOGISTICS AGENCY (DLA)

DLA is an autonomous tenant of Fort Belvoir who is responsible for their own salt usage and management. Starting in the winter of 2020, prior to the completion of the Chloride TMDL, the MS4 program obtained information on salt application and quantity from DLA to determine baseline application rates. The analysis of information provided noted that the application frequency by DLA could be reduced as the agency was noted as applying Ice Melt Products immediately following another application date and when only trace or no snowfall occurred.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to revise current practices at DLA to adjust the frequency and application rates of Ice Melt Products that are being used within this Agency by 31 October 2024 was partially met.

- Fort Belvoir will work with DLA to update their Ice Melt application practices.
- Current practices were reviewed and discussed with facility managers during the targeted prewinter season meeting/training that occurred on 9 November 2022; however, this was brief, and materials were neither provided to DLA nor did DLA confirm that they would be revising their practices.
- A meeting to review and discuss current practices was set for October 2023, however this did not occur. Current practices will again be reviewed and discussed with facility managers during the targeted prewinter season meeting/training set to occur in October 2024.

BMP CL.3 UPDATE BASE OPERATIONS CONTRACTOR SNOW PLAN

The Base Operations Contractor, Aleut, is responsible for removal of snow as well as anti- and de-icing procedures. A snow plan was developed as part of the contract with the Base Operations Contractor in November 2011. Policies, procedures, and equipment have been updated since this date, while the snow plan itself has not been updated since inception. The Chloride TMDL Action plan recommended that this Snow Plan be updated to better reflect the current standards and equipment used, as well as incorporate references to this Lower Accotink Creek Chloride TMDL Action Plan. It should also describe a clear strategy for when anti- or de-icing operations shall be conducted. A clear definition of conditions that are needed to trigger an anti- or de-icing event should be outlined within the Snow Plan.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal of updating the Snow Plan, developed in November 2011, that is a part of the contract with the Base Operations Contractor by 31 October 2023 was not yet achieved.

- Fort Belvoir will work with the Operations and Maintenance department to update the Base Operations Contractor Snow Plan in conjunction with the issuance of a Base Operations contract that is scheduled to be awarded in early 2025.
- A meeting to review and discuss current practices was set for October 2023, however this did not occur. There have been no plans to set up meeting to review and discuss practices during the 2024-2025 reporting period.

BMP CL.4 REVISE SALT BRINE MIXING RATES

The initial assessment in Chloride TMDL Action plan used historical salt application data to determine the average amount of treatment product used across the entirety of Fort Belvoir from 2017 to 2020. This data was used to determine the current salt treatment product application rate. The current mixing rate of brine at Fort Belvoir was determined to be approximately 8.34 lbs/gallon of Magnesium chloride. This was found to produce a brine which is much higher in salt percentage than necessary or recommended by SaMS.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to revise the current salt brine mixing practices at Fort Belvoir by 31 October 2023 was achieved.

- Current practices were reviewed and discussed with facility managers during the targeted prewinter season meeting/training that occurred on 1 November 2022.
- During this meeting, it was determined the new salt mixing rate would be revised to 2.5 lbs/gallon to aim to achieve a 23.3% salt solution which results in roughly 70% less salt than was formerly used for this practice.
- No pre-season meeting occurred during late 2023, however the application rates listed above were used during this reporting period.

BMP CL.5 ESTABLISH A CALIBRATION PROCESS

The initial assessment in Chloride TMDL Action plan showed there was no calibration protocols in place for salt application equipment used on Fort Belvoir. Establishing a calibration process could result in high potential cost savings as well as a more accurate picture of the amount of chloride containing products used at Fort Belvoir.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to establish a calibration protocol for salt equipment used on Fort Belvoir by 31 October 2023 was partially met.

- The MS4 Program will continue to work with O&M to establish and implement an equipment calibration process and have the requirements integrated into future winter maintenance contract specifications in conjunction with the issuance of a Base Operations contract that is scheduled to be awarded in early 2025. This still needs to occur.
- Current practices were reviewed and discussed with facility managers during the targeted prewinter season meeting/training that occurred on 1 November 2022.
- No pre-season meeting occurred during late 2023.
- A calibration process for the brine mixer as well as salt and sand spreaders occur annually around the beginning of the winter season.

- Calibration of all equipment, calibration more than once per year, documentation processes, and calibration training still need to occur to satisfy this BMP.

BMP CL.6 TARGETED TRAINING

The MS4 Program developed a Salt Management Training that is focused on salt applicators, supervisors, and decision-makers. The topics the training focuses on are: Plowing Practices, Equipment Calibration, Level of Service and Clearing Priorities, Anti-Icing Brine Mixing, Application Practices, Varying Application Rates, Use of Deicers at Different Temperatures, Salt Storage and Handling, Winter Maintenance Planning (Weather Forecasting/Surface Temperature Information) and Tracking and Reporting.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to update the training plan to include additional salt management training that is particularly focused towards salt applicators, supervisors, and decision-makers by 31 October 2023 has not been met.

- The Training Plan was not reviewed or updated during the 2023-2024 reporting period. The plan is scheduled to be updated by 1 October 2024. Updates during the 2022-2023 reporting period included:
    - Incorporation of targeted training for critical audiences as listed in the Chloride TMDL Action Plan approved by VADEQ in February 2022.
    - An additional level of training, level 7, was added that specifically covers Chloride TMDL information.
- The training slides were reviewed and updated to ensure all aspects of the targeted training program listed in section 5.6 of Chloride TMDL Action Plan were captured. Updates occurred prior to the 2022 winter season.
- Salt Management Training was provided during the 2023-2024 reporting period to five (5) different agencies, training a total of 72 individuals.

BMP CL.7 ANNUAL ASSESSMENT AND REPORTING

The Chloride TMDL Action Plan was most recently updated and submitted to Fort Belvoir on 24 July 2023 and is currently undergoing additional updates. The plan assessed current practices to serve as the baseline analysis for the current program and will be utilizing the data as a comparison point moving forward. As a part of the iterative implementation process inherent to how the plan works, an annual assessment to determine the efficacy of the program as well as where improvements are necessary is completed. This self-assessment will continue to refine operations at Fort Belvoir and can be used to give both operators and supervisors an idea of how things currently run and common issues that arise. Through this annual evaluation, it will become clear where improvements can be made.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to complete an annual post-season assessment by no later than the end of the permit cycle, 30 June of each year was not met.

- DPW Environmental utilizes the self-assessment form to evaluate operations and determine areas for improvement on a scale from one (1) to four (4) with four being rated the best level. The assessment worksheet should be used as follows:
    - Identify categories of the worksheet where the facility rated below a level of 4.

  - For each of these categories, identify short-term and long-term actions that may be taken to improve in that category.
  - Define a proposed schedule of implementation for each action (BMP).
  - Define measurable goals for each action defined (e.g., ensure 100% of equipment is fitted with calibration units by year 5, ensure 100% of personnel are trained annually, etc.).
- The annual operational assessment was not completed during the 2023-2024 reporting period.

The measurable goal to post any updates or changes to the Chloride TMDL Action Plan on the Fort Belvoir webpage within 30 days of any updates was applicable.

- The plan was undergoing revision in June 2023 and was finalized on 12 July 2023. It was posted for public comment on the Fort Belvoir Environmental Website on 24 July 2023, and a notice posted on the Fort Belvoir Facebook page on 28 July 2023. Fort Belvoir left the comment period open until 13 August 2023, allowing for at least 15 days for public comment as required under Part II.B.7. This section will also be included with next year's annual report.
- Once the operational assessment discussed above is performed, it will be used to adjust the current plan during the 2024-2025 reporting period.

The measurable goal to utilize the results of the annual assessment compared to the program goals to update the Chloride TMDL Action Plan to reflect new and achieved goals was not met.

- Fort Belvoir did not complete the annual operational and application rate assessments as discussed above.
- Table 17 below summarizes the results of the annual operational assessment during the 2022-2023 reporting period and changes recommended to the action plan. Updates to the plan focus on lower rated categories first. Once the annual operational and application rate assessment is completed, any updates to the Action Plan will be reflected on the 2024-2025 annual report.

Table 17: 2022-2023 Results from Annual Operational Assessment

Category	Rating	Defined Rating	Actions and Measurable Goals
Equipment Calibration	2	Equipment is calibrated at the start of each season but never checked OR Equipment is calibrated whenever the salt delivery system is serviced	DPW will continue to ensure equipment is calibrated at least annually at the beginning of the winter season. A calibration form and instructions have been developed. Will engage O&M to determine whether their use can be added as a deliverable in the Base Operations Contract. **Measurable Goal:** Ensure that 100% of salt application equipment is calibrated on a regular schedule and proper calibration records are kept by the following winter season (October 2023)
Material Application Rates	2	The application rates are estimated AND The amount of material applied is adjusted to suit conditions	Will engage O&M to update the Snow Plan to clearly define conditions needed to trigger an anti- or de-icing event. A Winter Weather Mobilizations Guidelines Table detailing salt application rates depending on weather forecasts has been developed to facilitate integration into existing contract language. **Measurable Goal:** Review Baseops SOP for determining what to use and how they adjust to different situation by the following winter season (October 2023).
Tracking Material Usage	3	Material use is tracked by event and location	Continue annual assessment of actual practices to identify areas for improvement.

Category	Rating	Defined Rating	Actions and Measurable Goals
		AND Material use is reviewed to assess compliance with BMPs	
Use of Liquid Materials	4	Direct liquid application is used AND All solid salt is pre-wetted or pretreated	Continue current practices for pretreatment and liquid usage.
Use of Low or Non-Chloride based snow and Ice control Materials	2	Some low or non-chloride based materials have been tried	Explore salt alternatives (to include cost consideration) for future integration into winter operations with Baseops contract. **Measurable Goal:** Implement use of alternatives and report changes/effectiveness in the annual report.
Salt Storage	3	All salt is stored on impermeable pad and covered by a roof	Continue current salt storage practices and explore possibility of capturing and disposing of impacted soils (none yet discovered).
Sand/Salt Mix Storage	3	All salt is stored on impermeable pad and covered by a roof	Continue current salt storage practices and explore possibility of capturing and disposing of impacted soils (none yet discovered).
Liquid Storage	3	All liquid is stored in a tank or totes on impermeable pad AND Collision protection is provided	Secondary containment is provided but does not seem to provide sufficient volume. Review plans with Baseops Contractor and the Contract Representative, current renovation is planned. **Measurable goal:** Implement adequate secondary containment for 100% of liquid storage areas by the following winter season (October 2023)
Summer Storage	3	All material is securely stored in tanks or on an impermeable pad covered with a roof.	Explore the ability and cost associated with removing all materials after the winter season.
Plowing	3	Plowing is used to remove accumulated snow before it becomes a hazard AND Plowing is usually planned to allow applied materials time to work	Explore the feasibility of stockpiling plowed snow to avoid meltwater.
Salt Management Training	4	Supervisors are trained in best salt management practices AND Operators are trained in best salt management practices AND Annual salt management refresher training is held AND Training records are maintained	Continue current training and documentation practices in place.

The measurable goal to use reported data to calculate the application rate for each product to see if goals were met or if additional BMPs are required to be implemented was met.

- Application data was tracked and submitted to DPW from three (3) key applicators on Fort Belvoir including Aleut, DLA, and NGA. All three are responsible for a portion of salt application within the Lower Accotink Creek watershed.
- Table 18 summarizes the target and actual application rates for the 2023-2024 winter season.

Table 18: 2023-2024 Annual Chloride Application Rates

Treatment Product	Target Application Rate	Application in Lower Accotink Creek	% Chloride	Average Number of Events	Actual Application Rate
DLA: Total Area treated = 40.17 acres					
Ice Melt	325 lbs/lane mile	43,120 lbs	98%	3	**357.81**
NGA: Total Area treated = 41.45 acres					
80/20 Magnesium Chloride (MgCl) and Sand Mixture	325 lbs/lane mile	1,520 lbs	80%	1	**36.67**
MgCl Brine	50 gal/lane mile	500 gallons	100%	1	**12.06**
Ice Melt	325 lbs/lane mile	49,980 lbs	98%	4	**301.45**
Aleut: Total Area treated = 1,317.40 acres Area within Lower Accotink Creek = 107.92 acres					
80/20 Magnesium Chloride (MgCl) and Sand Mixture	325 lbs/lane mile	0 lbs	80%	0	**0.00**
MgCl Brine	50 gal/lane mile	0 gallons	100%	0	**0.00**
Overall Application within the Lower Accotink Total Area Treated = 189.54 acres					
80/20 Magnesium Chloride (MgCl) and Sand Mixture	325 lbs/lane mile	1,520 lbs	80%	1	**8.02**
MgCl Brine	50 gal/lane mile	500 gallons	100%	1	**2.64**
Ice Melt	325 lbs/lane mile	95,000 lbs	98%	7	**70.17**

- Application rates are calculated and shown for each responsible party since each has different processes in place and can be targeted individually when developing BMPs.
- The 2023-2024 reporting season was a mild winter and minimal chloride, except for ice melt, was needed throughout the winter as indicated above by the low average number of events.
- **DLA:** Application rates in areas completed by DLA was found to be above the target rate for ice melt.
    - There was a significant increase in ice melt usage relative to last year which contributed to the increased application rate. DLA will need to work with Fort Belvoir to reduce the ice melt application rate to below 325 lbs/lane mile.
- **Aleut:** Application rates in areas completed by Aleut were found to be below target rates for brine and salt/sand mix. Aleut did not apply any chloride during the 2023-2024 reporting season.
    - As the amount of salt used by Aleut is tracked on an installation wide basis and the Lower Accotink Creek only accounts for a portion of the area treated, the application rates for this area assumes the application is consistent throughout the installation.
- **NGA:** Application rates in areas completed by NGA was found to be below target rates for brine, ice melt, and for the salt/sand mix.
    - Based on tracking of usage completed during the 2021-2022 reporting period it was noted that NGA is treating a significantly larger area than originally captured in the plan. This updated acreage has been included in the update to the Chloride TMDL Action Plan.
    - There was a significant increase in the use of ice melt at NGA during the 2023-2024 reporting period and though the application rate is below the target rate of 325 lbs/lane mile, the application rate is just below the target rate.

BMP Assessment: BMPs CL.1 through CL.7 identified in the Program Plan and Chloride TMDL action plan have not been fully implemented and therefore efficacy cannot be fully determined. Fort Belvoir will continue

implementation of the current plan using annual assessments and the iterative process to identify and implement improvements.

D. SEDIMENT TMDL FOR THE LOWER ACCOTINK CREEK

The Lower Accotink Creek Sediment TMDL was approved by the SWCB on 12 April 2018 and approved by the EPA on 23 May 2018. The Lower Accotink Creek Sediment TMDL Action Plan was completed as per Part II.B of the 2018- 2023 General Permit, which requires that the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II.B.3 - 7 as applicable no later than 30 months after the permit effective date. This Lower Accotink Creek Sediment TMDL Action Plan allowed for a public comment period by being posted on the Fort Belvoir Home Page under Environmental Documents for Stormwater in January 2021. A Notice of Availability for the document was:

- Posted on the Fort Belvoir Environmental Facebook page on 8 January 2021.
- Posted on the Fort Belvoir Home Page on 8 January 2021.
- Published in the Fort Belvoir newspaper, the *Belvoir Eagle* on 14 January 2021.

Fort Belvoir provided for the public comment period to be open until 15 February 2021 allowing for at least 15 days for public comment as required under Part II.B.7. Fort Belvoir DPW did not receive any comments during this period therefore, the public comment section was the only section updated prior to submittal of the Final Lower Accotink Creek Sediment TMDL Action Plan to VADEQ on 23 February 2021.

VADEQ approved the Sediment TMDL plan as is, with the adjusted targeted reduction values, in a letter dated 15 October 2021 but noted:

- The re-application process for the Fort Belvoir Stormwater Industrial Permit (VA0092771) had commenced.
- When this permit is reissued, changes to the acreage in the MS4 and stormwater industrial areas will likely occur.
- Fort Belvoir should submit a revised Sediment MS4 TMDL action plan to DEQ reflecting the updated MS4 area and the sediment removal calculations for stormwater management facilities, stream restorations, street sweeping, and land use conversions 180 days after reissuance of the Permit No. VA0092771.

The overall goal of this Action Plan is to provide the means and methods and a general level of effort that will be needed for Fort Belvoir to meet the 55% Lower Accotink Creek TMDL reduction targets in the MS4 permit for sediment developed by the VADEQ. A Waste Load Allocation (WLA) of 235 tons/year as well as a Baseline Load of 519 tons/year was already given by VADEQ through the Volume II Sediment TMDLs for the Lower Accotink Creek Watershed. However, it was noted that regulated areas within the MS4 service area have significantly changed since publication of this document. Therefore, the baseline load for Fort Belvoir was re-evaluated as the removal of areas within the MS4 Service Area due to additional VPDES Permits has occurred. Based off this re-evaluation, an adjusted Baseline Load of 312.80 tons/year was calculated, with a new adjusted target reduction of 77.80 tons/year (or pounds/year) of sediment to be achieved and this is outlined in the Sediment TMDL Action Plan.

The MS4 General Permit #VAR040093 effective on 1 November 2023 requires that the permittee shall update all previously approved local TMDL action plans to meet the conditions of Part II.B.3 - 7 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Initial updates to the Sediment TMDL Action Plan occurred in July 2023 and were finalized and submitted to Fort Belvoir on 6 September 2023. Further updates are currently underway.

Fort Belvoir considered all projects completed since the 2009 progress run for credits as described in VADEQ Guidance Memo No. 20-2003 which replaced Guidance Memo No. 15-2005 as guidance for meeting local TMDL

waste load allocations for sediment. The strategies listed in the plan as available to meet the required reductions included Land Use changes, Urban Structural BMPs, Urban Stream Restoration, Street Sweeping, and Storm Drain Cleaning.

BMP TSS.1 SEDIMENT TMDL ACTION PLAN IMPLEMENTATION AND REPORTING

The Sediment TMDL Action Plan was developed in early 2021 and approved by VADEQ in October 2021, and is currently under revision for a formal submittal to VADEQ due by 1 May 2025. The achieved reductions from each implemented BMP were compared to both the adjusted load reduction (77.80 tons/year) and original load reduction (312.80 tons/year) to determine of the WLA goals were met. Below is a summary of the actual progress made towards achieving the required reductions and a status report on the identified measurable goals necessary to meet the reduction requirements.

Table 19: Actual Lower Accotink Creek Sediment TMDL Reductions Achieved 2023-2024

Pollutants Of Concern	BMP	Required Reduction (lbs. /yr.)	Reductions Achieved (lbs. /yr.)	% Of Required Reduction *(Original)*	% Of Required Reduction *(Adjusted)*
Total Suspended Solids	Urban Structural BMP's	*Original:* ***625,600***	100,230.40	16.02%	64.42%
	Stream Restoration		5,113.94	0.82%	3.29%
	Street Sweeping		22,846.10	3.65%	14.68%
	Storm Drain Cleaning	*Adjusted:* ***155,600***	0.00	0%	0%
	Land Use Change		19,901.27	3.18%	12.79%
TSS Reduction Achieved vs. WLA				***23.67%***	***95.17%***

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to inspect and maintain the 56 Urban Structural BMPs located within the Lower Accotink Creek Watershed and address any deficiencies noted during inspections within one (1) year was partially met.

- Only 39 out of the 56 SMFs located within the Lower Accotink were evaluated during this reporting period.
  - 33 were inspected during the permit cycle and inspections noted that no significant maintenance was required. Minor maintenance suggested replacement of mulch in areas, removal of vegetation or trash, or removal of sediment accumulation as required.
  - One (1) SMF was inaccessible due to ongoing construction in the area (6900).
  - Five (5) SMFs were identified as requiring major maintenance which included removal of woody and overgrown vegetation as this prevented adequate access to the SMFs and filling in a sinkhole (6793, 6818, 6851, 7210, and 7223).
  - No SMFs had maintenance performed on them during this reporting period.
  - 17 SMFs were not inspected, therefore maintenance requirements are unknown:
    - 7590, 7591, 7592, 7593, 7594, 7595, 9018, 9019, 9020, 9021, 9023, 9024, 9025, 9026, 9027, 9028, and 9029.
  - If significant maintenance had been required, the deficiencies will need to be addressed by 30 June 2024 or credits for the facilities would have been lost. The deficiencies identified for the five (5) SMFs listed above were addressed prior to the 30 June 2024 deadline and credits for these SMFs were retained.
- An additional SMF was installed during the 2023-2024 permit cycle and will be added to the Action Plan.

  - This SMF is a level 1 bioretention pond and was installed during the DAAF Fueling Systems Repairs project.
- Fort Belvoir will ensure that all 57 existing facilities, new and old belonging to Fort Belvoir, will be inspected during the 2024-2025 reporting period to ensure credits can be maintained.
- Reductions achieved from new and old SMFs based on findings from the 2023-2024 reporting cycle are summarized in Table 20 below.

Table 20: Credits from SMFs within the Lower Accotink Creek Watershed

BMP Name/Type	Year Completed	Chesbay Program BMP #	Sediment Removal Efficiency	Acres Treated	TSS Reduction (lb./yr)
56 Original SMFs considered in the plan	2009-2023	Various	Various	244.9	100,230.40
Seventeen (17) x SMFs not inspected	2018-2020	Various	Various	-34.78	-22,394.42
			Total Reductions	**210.12**	**77,835.98**

The measurable goal to inspect and verify functionality of the two (2) stream restoration projects considered in the plan once every five (5) years and address any deficiencies noted during inspections within one year was not met.

- The two (2) stream restoration projects were completed between 2011 and 2019:
  - Verification of long-term performance for the North Area project was completed by Fort Belvoir in January 2019 and determined that the project remains effective and can maintain credits for another five (5) years. Reverification of this project was due by January 2024; this was not completed so the project did not retain credits.
  - The NMUSA Natural Channel Design was assessed on 30 December 2019 and determined the project remains effective and can maintain credits for another five years. Reverification of this project is due by 30 December 2024.
- Reductions achieved from the Stream Restoration Projects are summarized in Table 21 below.

Table 21: Credits from Stream Restoration Projects within the Lower Accotink Creek Watershed

BMP Name/Type	Year Completed	Year Verified	Removal Rates (lbs/ft)	Linear Feet Restored	TSS Reduction (lb./yr)
North Area Natural Channel Design	2011	**Due 2024**	15.13	128	0.0
NMUSA Natural Channel Design	2019	**Due 2024**	15.13	210	3,177.3
			Total Reductions	**210**	**3,177.3**

The measurable goal to perform and document the street sweeping program as specified under the O&M contract was met.

- Sweeping was to be completed monthly based on Technical Exhibit SA2 of the Base Operations Contract that specifies the locations to be swept.
  - The contract specifies 2,686 acres of land that should be swept monthly of which 304.22 acres falls within the regulated MS4 area in the Lower Accotink Creek Watershed.
- Based on reported data to DPW, street sweeping practices for the 2023-2024 reporting period falls under scenario SCP-4 as listed in Guidance Memo No. 20-2003 which would achieve a removal rate of 6% for TSS.
- Table 22 below shows the actual reductions achieved during the 2023-2024 reporting period.

Table 22: Annual 2023-2024 Street Sweeping Within Lower Accotink Creek

MS4 Area Sweeping – Lower Accotink Creek				
Street Sweeping Practice #	**TSS Removal Rate**	**Sq. Yd.**	**Acres**	**TSS Reduction (lb/yr)**
SCP-4 Regenerative sweeper 10 passes/yr	6%	1,472,447	304.22	22,846.10
			Total Reductions	**22,846.10**

The measurable goal to perform and document the Storm Drain Cleaning as specified under the O&M contract was partially met.

- Sediment is to be removed from the storm drain systems on Fort Belvoir Property by the Base Operations Contractor. Collected sediment is taken to two (2) dumpsters and then are allowed to dry prior to sampling and disposal. At the disposal time, the dry weight is recorded in a waste disposal manifest.
- The dry weight of material collected is inclusive of the entirety of Fort Belvoir therefore, to calculate reductions within the Lower Accotink Creek Watershed a ratio to the total MS4 area is used. The Lower Accotink Creek Watershed has a total of 1,429.5 acres within the MS4 Service Area, making up for 44.64% of the total MS4 Service Area.
- During the 2023-2024 reporting period the Base Operations contractor did collect debris from storm drain cleaning, however; no debris was disposed of as not enough debris was collected to warrant Toxicity Characteristic Leaching Procedure (TCLP) testing and subsequent disposal. The total dry weight of the collected debris from storm drain cleaning during this reporting period was not recorded.

BMP TSS.2 EDUCATION AND TRAINING

The goal of Fort Belvoir's Education and Outreach and Training Programs is to inform civilian and military personnel, residents and contractors about the steps that can be taken to reduce stormwater pollution to the maximum extent practicable (MEP). As such, Sediment is listed as one of the high priority stormwater issues discussed under MCM #1 and is one of the most common topics covered in the Training program discussed under MCM #6.

During the reporting period from 1 July 2023 – 30 June 2024 the following goals are set forth in the Program Plan.

The measurable goal to publish one (1) article and/or stormwater newsletter annually that discusses the sediment transport and water quality issue, proper ESC measures, reporting information, and steps that can be taken to reduce sediment sources was not met.

- No articles and/or stormwater newsletters published this reporting period discussed the sediment transport and water quality issue, proper ESC measures, reporting information, and steps that can be taken to reduce sediment.

The measurable goal to provide specialized training focused on proper construction site sediment and erosion control, importance of Stormwater BMPs and storm sewer maintenance, implementation, and benefits of urban stream restoration with target audiences being construction projects, Engineering Division and the Operations and Maintenance Division, including the Base Operations Contractor was met.

- The Training Plan identifies seven (7) levels of training at different magnitudes of content with Level 1 being the most extensive. Erosion & Sediment Control Basics is covered in Training Levels 1, 2, 3, 5, and 6.
- All construction permitted under a CGP must have a RLD and all RLD Personnel and other pertinent site employees receive Level 5 training to address erosion and sediment control concerns before construction begins on-site. A total of 20 people associated with three large construction projects received Level 5 – preconstruction training during the reporting cycle.
- Fort Belvoir DPW employees are usually trained using Level 3 & 4 training once a year to applicable field personnel. DPW personnel were trained this period on 3 August 2023, 20 February 2024, and 12 June 2024.

BMP Assessment: BMPs TSS.1 and TSS.2 identified in the Program Plan and Sediment TMDL action plan have been partially effective in achieving the goals of the TMDL as approximately 95% of the adjusted load reduction required was achieved which is a 10% increase from last year. Fort Belvoir recognizes that ensuring that street sweeping is done at least frequently enough to meet requirements of SCP-4 is the fastest and easiest way to meet the required load reductions and will work to achieve 100% reductions during this permit cycle (2023-2028). Fort Belvoir will need to ensure at least one (1) article and/or stormwater newsletter discussing sediment transport and water quality issue, proper erosion and sediment control (ESC) measures, reporting information, and steps that can be taken to reduce sediment is published during the 2024-2025 reporting year.

5. CHANGES TO THE MS4 PROGRAM PLAN

Part I.D.3.e of the MS4 General Permit requires an evaluation of the MS4 Program Plan implementation. Each portion of the Program Plan was evaluated individually in Sections 2, 3, and 4 above. Table 23 shows a summary of changes made to the Program Plan throughout the 2023-2024 reporting period and as a part of the evaluation of its implementation. Below is a succinct list detailing the major changes made to the MS4 Program Plan during the 2023-2024 reporting period or recommended for the 2024-2025 reporting period.

Implementation of the MS4 Program continues to evolve and be refined as is the intent of the iterative process. Overall, changes made to the Program Plan during this reporting period reflect refinements to clarity, adaptations that were prompted by external changes, such as the use of new communication avenues or addition of TMDL plans, or lessons learned during implementation that have prompted adjustments. As such, MS4 Program implementation remains adaptable and effective as Fort Belvoir strives to reduce pollutant loading and protect water quality to the maximum extent practicable.

Table 23: Changes to the Program Plan as of 30 June 2024

Page Number	Change	Date
2, 34, 50	Indicated Fort Belvoir does not pass the 50,000-population threshold for using the 2020 census data based on the new MS4 permit, and therefore will continue to use the 2010 census data for urban areas.	11/17/2023
12-13	Section 5.1 – Updated Table 1: MS4 Program Administration – Contract Support to reflect the new funding cycle year (2023-2024) under the "Funding Status" column.	11/21/2023
13	Section 5.2 – Updated the permit reference to reflect changes made in the new MS4 permit.	11/17/2023
13-14	Section 5.3 – Updated the dates of several of the documents listed under this section to ensure all current versions are referenced.	11/28/2023
17	Section 6 – Updated Figure 6 to better show general location of Fort Belvoir.	1/23/2024
18	Section 6 – Updated VA Department of Conservation and Recreation GIS Mapping program to VADEQ Environmental Data Mapper.	1/23/2024
18-19	Sections 6.1 – 6.5 – Updated acreage numbers for each watershed off 202 Draft Phase III ChesBay TMDL Action Plan.	1/23/2024
29	Section 8.1 – Updated the measurable goals and annual reporting and recordkeeping sections of BMP 1.1 to reflect the information found in the 2022-2023 annual report.	11/29/2023
29-30	Section 8.2 – Updated bullet points at beginning of this section to reflect the new MS4 permit language.	11/17/2023
30, 31, 37, 39, 43	Updated the link to the Fort Belvoir Environmental Website as it was only linked to the Fort Belvoir homepage.	11/29/2023
30	Section 8.2 – Updated permit references to reflect the new MS4 permit.	11/17/2023
32	Section 8.2 – Updated Table 6 to include opportunities for educational events during the Winter	1/26/2024
32	Section 8.2 – Updated the measurable goals section of BMP 2.1 to reflect the information found in the 2022-2023 annual report and include new Chesapeake Bay TMDL Action Plan posting requirements.	1/26/2024
33-34	Section 8.3 – Updated bullet points at beginning of section to reflect the new MS4 permit language and references.	11/29/2023

Page Number	Change	Date
34-35	Section 8.3 – Updated permit references and the measurable goals section of BMP 3.1 to reflect the new MS4 permit language and references.	1/26/2024
35	Section 8.3 – Referenced Consolidated Policy Memorandum #28 as this is a combination of all policy memorandums mentioned in this plan.	11/29/2023
35	Section 8.3 – Updated the measurable goals section of BMP 3.2 to reflect the information found in the 2022-2023 annual report.	11/29/2023
36	Section 8.3 – Updated the measurable goals and annual reporting and recordkeeping sections of BMP 3.3 to reflect the new MS4 permit, and information found in the 2022-2023 annual report.	11/29/2023
37	Section 8.4 – Updated the revision dates for all the Fort Belvoir bulletins.	11/29/2023
38	Section 8.4 – Updated signer of LDL to state Environmental Division Chief.	2/2/2024
39	Section 8.4 – Updated permit references to reflect the new MS4 permit.	11/17/2023
39, 41-43, 49, 54-56, 65	Changed all instances of “DPW-ENRD” to the current “DPW-ENV”.	11/29/2023
39	Section 8.4 – Updated the measurable goals section of BMP 4.1 to reflect the information found in the 2022-2023 annual report.	11/27/2023
40	Section 8.4 – Updated the first paragraph of BMP 4.2 to reflect the new MS4 permit language in reference to ESC plans and inspections and changed the primary and backup weather stations used for determining the rainfall amount.	11/29/2023
41	Section 8.4 – Updated the permit references in the measurable goals section of BMP 4.2 to reflect the new MS4 permit.	11/17/2023
41	Section 8.4 – Updated the permit reference in the first paragraph and in the annual reporting and recordkeeping section of BMP 4.3 to reflect the new MS4 permit.	11/17/2023
42	Section 8.4 – Table 7 – Updated that 3rd repeat violations will have a warning letter signed by the Environmental Division Chief instead of the Director of DPW.	2/2/2024
44-45	Section 8.5 – Updated the new permit period (2023-2028), the permit references, and bullet points to reflect the new MS4 permit.	11/21/2023
45	Section 8.5 – Updated the measurable goals section and permit references in the annual reporting and recordkeeping section of BMP 5.1 to reflect the new MS4 permit, and the information found in the 2022-2023 annual report.	11/27/2023
45-46	Section 8.5 – Updated all sections of BMP 5.2 to reflect the new MS4 permit references and language and information found in the 2022-2023 annual report.	11/27/2023
47	Section 8.6 – Updated the bullet points at the beginning of the section to reflect the new MS4 permit references and language.	11/27/2023
48	Section 8.6 – Updated the contract dates under BMP 6.1 to reflect the new permit cycle (2023-2028).	11/21/2023
48-49	Section 8.6 – Updated the bullet points for BMP 6.1 to reflect the new MS4 permit language.	11/21/2023
50	Section 8.6 – Updated first paragraph of to indicate Fort Belvoir will continue to identify new HPFs under the 2010 census urban areas data as Belvoir does not meet the 50,000 minimum population requirements to use the 2020 census data.	12/4/2023
50-51	Updated BMP 6.2 to reflect the new MS4 permit language and references and updated the permit cycle (2023-2028).	11/21/2023
51-53	Section 8.6 – Updated Table 8: MS4 High Priority Facility Evaluations and Findings under BMP 6.2 with the new information included in the 2022-2023	12/6/2023

Page Number	Change	Date
	annual report (Note: AAFES PX/AAFES Commissary was split into two separate facilities under designation MS4 HPF-002A and MS4 HPF-002B, respectively).	
53	Section 8.6 – Updated the annual reporting and recordkeeping and the responsible party sections of BMP 6.2 to reflect the new MS4 permit, and information found in the 2022-2023 annual report.	12/6/2023
53-54	Section 8.6 – Updated all of BMP 6.3 to reflect the new MS4 permit language and references, and Table 9: Nutrient Management Plans to ensure all current versions and acreages are appropriately referenced.	2/16/2024
54-55	Section 8.6 – Updated all of BMP 6.4 to reflect the new MS4 permit, and information found in the 2022-2023 annual report.	11/27/2023
58	Section 9 – Updated the permit reference in middle of page to reflect the new MS4 permit.	11/21/2023
59	Section 9.1 – Included the Phase III WIP planning goals into this section.	11/27/2023
60	Section 9.1 – Updated the permit references in the second to last paragraph on this page to reflect the new MS4 permit.	11/27/2023
61-62	Section 9.1 – Included a section on the Draft Phase III Chesapeake Bay TMDL and added Table 13: Phase III ChesBay Progress Summary on Meeting 100% Reductions to display the achieved reductions for Nitrogen, Phosphorus, and Total Suspended Solids.	11/27/2023
63	CHESBAY.1 – Updated the permit years 2-5 (2024-2028) under the measurable goals section and the annual reporting and recordkeeping sections to reflect the new MS4 permit language and references, and information found in the 2022-2023 annual report.	11/28/2023
64	Section 9.2 – Updated this section with the new Bacterial TMDL information (dated 8/24/2023), removed the Fort Belvoir Eagle bullet point, and updated permit references to reflect the new MS4 permit.	11/28/2023
65	Section 9.2 – Updated permit references within the measurable goals section of BAC.1 to reflect the new MS4 permit.	11/27/2023
65	Section 9.2 – Updated the measurable goals section of BAC.2 to reflect the information found in the 2022-2023 annual report.	11/28/2023
65	Section 9.2 – Updated the measurable goals section of BAC.3 to reflect the information found in the 2022-2023 annual report.	11/28/2023
66	Section 9.3 – Updated this section with the new PCB TMDL information (dated June 2023), removed the Fort Belvoir Eagle bullet point, and updated permit references to reflect the new MS4 permit.	11/28/2023
67-69	Section 9.4 – Updated this section with the new Sediment TMDL information, removed the Fort Belvoir Eagle bullet point, updated Table 14: Lower Accotink Creek Sediment TMDL Reductions Achieved, and updated permit references to reflect the new MS4 permit.	11/28/2023
70-71	Section 9.5 – Updated this section with the Chloride TMDL information (dated 7/12/2023), updated the posted date on the Fort Belvoir Homepage (7/24/2023) and the Fort Belvoir Facebook Page (7/28/2023), and updated permit references to reflect the new MS4 permit.	11/28/2023
73	Section 9.5 – Updated the measurable goals section of CL.5 to reflect the information found in the 2022-2023 annual report.	11/28/2023
74	Section 9.5 – Updated the measurable goals section of CL.6 to reflect the information found in the 2022-2023 annual report.	11/28/2023

Page Number	Change	Date
Appendix A	Revised Appendix A to include the new delegation of authority letter signed by the Director of Public Works.	12/28/2023
Appendix B	Revised Appendix B to include the updated versions of the ESC and MS4 bulletins and guidance documents.	12/28/2023

A. Detailed Plan Revisions and Justifications

Plan Purpose and Revisions

No significant changes were made to this section.

Facility Background and MS4 Regulated Service Area

No significant changes were made to this section.

Properties Not Covered under the Fort Belvoir MS4 Permit

No significant changes were made to this section.

Legal Authorities

Fort Belvoir Policy Memorandum #28, Environmental Policy

Fort Belvoir updated to state that this policy is not currently in place, describe why, and indicate the path forward and that the policy has been staffed for signature with the Garrison Commander.

Fort Belvoir Policy Memorandum #71, Prohibition of Illicit/ Unauthorized Discharges into the MS4 and Waterways

Fort Belvoir updated to state that this policy is not currently in place, describe why, and indicate the path forward and that the policy has been staffed for signature with the Garrison Commander.

Fort Belvoir Policy Memorandum #73, Stormwater Pollution Prevention Plan Requirements

Fort Belvoir updated to state that this policy is not currently in place, describe why, and indicate the path forward and that the policy has been staffed for signature with the Garrison Commander.

Program Administration

Organizational Structure (Permit Part I.C.1.a)

Contract support responsibilities and funding status for BASEOPS and Environmental Support for the 2023-2024 reporting period were updated, as needed, in the narrative and on Table 1.

Delegation of Signature Authority (Permit Part III, K.2.)

Newest delegation of signature authority dated 17 August 2023 from Garrison Commander memorandum referenced.

Documents Incorporated by Reference (Permit Part I, C.1.d.)

All plan dates were updated based on most recent revisions.

Impaired Waters

No significant changes were made to this section.

Minimum Control Measures

MCM#1: Public Education and Outreach on Stormwater Impacts

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

BMP 1.1 Implement a Public Education and Outreach Plan

Updated the measurable goals and annual reporting recordkeeping sections based off the findings in the 2022-2023 annual report.

MCM#2: Public Involvement/ Participation

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

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

Updated Table 6 to include opportunities for educational events during the winter and updated the measurable goals to reflect the findings in the 2022-2023 annual report and the new Chesapeake Bay TMDL Action Plan posting requirements.

BMP 2.2 Public Involvement Activities

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

MCM#3: Illicit Discharge Detection and Elimination

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

BMP 3.1 Maintain an Accurate MS4 Map and Information Table

Updated permit references to reflect changes in the 2023-2028 MS4 General Permit and updated measurable goals.

BMP 3.2 Prohibit Unauthorized Non-Stormwater Discharges into the MS4

No significant changes were made to this section.

BMP 3.3 Maintain and Implement U.S. Army, Fort Belvoir, Virginia Illicit Discharge Detection and Elimination (IDDE) Plan

Updated the measurable goals, annual reporting, recordkeeping sections to reflect the changes in the 2023-2028 MS4 General Permit and the findings in the 2022-2023 annual report.

MCM#4: Construction Site Stormwater Runoff Control

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

BMP 4.1 Communicate the Requirements of the MS4 Program

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

BMP 4.2 Erosion and Sediment Control (ESC) Site Inspections

The NOAA DAAF weather station was added as the main weather station and the Yacht Haven weather station found on Weather Underground has been added as a backup station in case the main station is nonfunctional. A description and link for both stations was included.

BMP 4.3 Progressive Compliance and Enforcement Strategy

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

MCM#5: Post-Construction Runoff Control

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

BMP 5.1 Conduct Annual Inspections and Maintenance of Storm Water Management Facilities

Updated measurable goals, annual reporting, and recordkeeping sections to reflect the changes in the 2023-2028 MS4 General Permit and the findings in the 2022-2023 annual report.

BMP 5.2 Maintain an Electronic Database or Spreadsheet

Updated measurable goals, annual reporting, and recordkeeping sections to reflect the changes in the 2023-2028 MS4 General Permit and the findings in the 2022-2023 annual report.

MCM#6: Pollution Prevention/ Good Housekeeping for Municipal Operations

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

BMP 6.1 Written Procedures for Operations and Maintenance Activities

Contract dates were updated to reflect the 2023-2028 permit cycle.

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

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit. Noted that Fort Belvoir will continue to identify new HPFs under the 2010 census urban areas data as Fort Belvoir does not meet the 50,000 minimum population requirements to use the 2020 census data. The MS4 HPF Evaluations found in Table 8 was updated to reflect the findings in the 2022-2023 annual report and split the AAFES PX/AAFES Commissary facility into two separate facilities under designation HPF-002A and HPF-002B, respectively. Lastly, the annual reporting, recordkeeping, and responsible party sections were updated.

BMP 6.3 Implement Nutrient Management Plans

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit and Table 9 was revised to ensure all current versions of the NMPs, and acreages treated are appropriately referenced.

BMP 6.4 Revise and Implement Written Training Plan

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit.

Chesapeake Bay TMDL for Nitrogen, Phosphorus and Sediment

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit and referenced the Phase III WIP planning goals.

BMP CHESBAY.1 Chesapeake Bay TMDL Action Plan Implementation

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit. Included a section on the Draft Phase III Chesapeake Bay TMDL and added Table 13: Phase III Chesapeake Bay Progress Summary on Meeting 100% Reductions to display the achieved reductions for Nitrogen, Phosphorus, and Total Suspended Solids.

Local TMDL Action Plans

Bacteria TMDL for the Lower Accotink Creek Watershed

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit and updated the measurable goals to reflect the findings of the 2022-2023 annual report. Removed references to the Fort Belvoir Eagle.

Polychlorinated Biphenyls (PCB) TMDL for the Potomac River

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit. Included information from the new PCB TMDL report dated June 2023 and removed any references to the Fort Belvoir Eagle.

Sediment TMDL for the Lower Accotink Creek

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit. Included information from the new Sediment TMDL report and removed references to the Fort Belvoir Eagle. Updated Table 14: Lower Accotink Creek Sediment TMDL Reductions Achieved.

Chloride TMDL for the Lower Accotink Creek

Permit references were updated to reflect changes in the 2023-2028 MS4 General Permit and updated the measurable goals to reflect the findings of the 2022-2023 annual report. Included information from the new Chloride TMDL report dated July 2023 and updated the posted date on the Fort Belvoir Homepage to 24 July 2023 and the Facebook page to 28 July 2023.

2024

APPENDIX A

2024 DELEGATION OF SIGNATURE AUTHORITY

FORT BELVOIR 2023-2024 MS4 ANNUAL REPORT
PERMIT NO. VAR040093

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

AMIM-BVP-E

MEMORANDUM FOR Ms. Sybille R. Vega, Chief, Environmental Division, Directorate of Public Works, 9430 Jackson Loop, Fort Belvoir, VA 22060-5116

SUBJECT: Delegation of Signature Authority for the Municipal Separate Storm Sewer System (MS4) Virginia Pollutant Discharge Elimination System (VPDES) Permit #VAR040093 for Routine Correspondence

1. You are authorized to sign all routine correspondence related to the Installation's MS4 VPDES Permit #VAR040093, effective upon submission of this delegation memorandum to the Virginia Department of Environmental Quality (VADEQ) as required by 9VAC25-870-370.B.3 and 9VAC25-890-40, Part III.K.2. All correspondence signed must comply with the provisions of AR 25-50, paragraph 6-2, concerning authority.

2. Fort Belvoir's storm water management program is performed in accordance with the Clean Water Act (33 USC Sec.1251), Virginia Storm Water Management Act (Virginia (VA) Code Sections (Secs) 62.1-44.15:24 et seq.), Virginia Erosion and Sediment Control Law (VA Code Secs 62.1-44.15:51 et seq.), Virginia Storm Water Management Regulations (9VAC25-870-10 et seq.; 9VAC25-880-1 et seq.; 9VAC25-890-1 et seq.) and Virginia Erosion and Sediment Control Regulations (9VAC25-840-10 et seq.; 9VAC25-850-10 et seq.).

3. Routine correspondence includes:

a. Correspondence related to and including submittal of annual reports for the MS4 VPDES Permit.

b. Correspondence related to Requests for Information received from the Commonwealth of Virginia, VADEQ.

c. Correspondence related to transmittal of Erosion and Sediment Control and Stormwater Management Plans to VADEQ for review and approval.

d. Land Disturbance Letters issued to construction contractors to signify that construction commencement is approved.

4. Signatory authority for submittal of MS4 VPDES Permit registration statement remains with the Garrison Commander.

5. Submittal of routine correspondence described in; 9VAC25-870-370 Part A.3 and Part B, and 9VAC25-890-40 Part 3.K.1.a shall include certification of reports or other information required under the aforementioned.

6. This delegation may be withdrawn at any time. Notice of withdrawal will be provided to the VADEQ.

7. Authority: AR 25-50 (Preparing and Managing Correspondence), paragraph 6-1, 10 October 2020.

JOSEPH V. MESSINA
COL, AG
Commanding

2024

APPENDIX B

NEW STORMWATER MANAGEMENT FACILITIES AND MS4 OUTFALLS INSTALLED AND/OR DISCOVERED DURING 2023-2024 REPORTING PERIOD

FORT BELVOIR 2023-2024 MS4 ANNUAL REPORT
PERMIT NO. VAR040093

PROJECT NAME:	Davison Army Airfield (DAAF) Fueling Systems Repairs (No CGP)				1 JULY 2023 - 30 JUNE 2024
DISTURBED AREA (DA) WITHIN WATERSHED(S):					
Watershed 1	Accotink Creek	DISTURBED AREA =	0.203	acres	
Watershed 2		DISTURBED AREA =		acres	
		TOTAL DISTURBED AREA =	0.203	acres	

Stormwater Management Facilities

Facility ID Shown in Plan	Facility Type	Purpose	Acres Treated	Pervious Acres Treated	Impervious Acres Treated	Watershed	Receiving Waters	VAHU6 Code	Coordinates	Date Facility Brought Online	MS4 ID	Most Recent Inspection Date
BIO-1	Level 1 Bioretention	Water Quality and Quantity	0.24	0.09	0.15	Accotink Creek	Unnamed Tributary to Accotink Creek	PL30	38°42'41.65"N 77°10'54.27"W	11/26/2023	9073	11/26/2023

PROJECT NAME:	Building 386 Human Performance Training Center (HPTC) (No CGP)				1 JULY 2023 - 30 JUNE 2024
DISTURBED AREA (DA) WITHIN WATERSHED(S):					
Watershed 1	Dogue Creek	DISTURBED AREA =	0.44	acres	
Watershed 2		DISTURBED AREA =		acres	
		TOTAL DISTURBED AREA =	0.44	acres	

Stormwater Management Facilities

Facility ID Shown in Plan	Facility Type	Purpose	Acres Treated	Pervious Acres Treated	Impervious Acres Treated	Watershed	Receiving Waters	VAHU6 Code	Coordinates	Date Facility Brought Online	MS4 ID	Most Recent Inspection Date
1	Level 1 Bioretention	Water Quality and Quantity	0.33	0.07	0.26	Accotink Creek	Unnamed Tributary to Accotink Creek	PL30	38°40'47.68"N 77°08'25.22"W	6/11/2024	9074	6/11/2024

PROJECT NAME:	**N/A**						**1 JULY 2023 - 30 JUNE 2024**
DISTURBED AREA (DA) WITHIN WATERSHED(S):							
Watershed 1		DISTURBED AREA =		acres			
Watershed 2		DISTURBED AREA =		acres			
		TOTAL DISTURBED AREA =	0	acres			
Stormwater Outfall Locations							
Outfall ID Shown in Plan	**Contributing Area (Acres)**	**Watershed**	**Receiving Waters**	**VAHU6 Code**	**Approximate Latitude & Longitude of Outfall**	**Comments**	**MS4 Structure ID**

2024

APPENDIX C

SOCIAL MEDIA POSTINGS AND INTERACTION REPORT

FORT BELVOIR 2023-2024 MS4 ANNUAL REPORT
PERMIT NO. VAR040093

2023-2024 Social Media Interaction Report

2023-2024 Social Media Interaction Report

The Purpose of this document is to summarize the Published posts for the Fort Belvoir Environmental Division Facebook Page as they relate to Stormwater, Water Quality, and Pollution Prevention. The below shows all posts related to education, outreach, and public involvement from 1 July 2023 to 30 June 2024. For each post there is information on the content of the post, the reach (how many people viewed the post); and engagement (defined as post clicks, reactions, and shares).

Caption	Post Date	Content Type	Reach	Likes	Link Clicks	Comments	Shares
Check out our Summer Stormwater Newsletter. This article focuses on information on how your facility should prepare to respond to spills and how to minimize or eliminate exposure to the environment. Although we should do our best to prevent spills...we are only human, it's bound to happen! So, let's make sure we are prepared to respond.	7-Jul-23	Facebook Post	147	1	0	0	1
As required by the Garrison's Municipal Separate Storm Sewer System (MS4) Permit, Fort Belvoir, Directorate of Public Works, Environmental Division is accepting comments in writing on the Draft MS4 Program Plan until 13 August 2023. These documents can be found at https://home.army.mil/.../director.../environmental division then click on "MS4 Stormwater Program". Links to all relevant documents can be found here. Submit comments by email to Ashley McMahon at ashley.c.mcmahon2.civ@army.mil or at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.	28-Jul-23	Facebook Post	129	0	0	1	0
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As required by the Garrison's Municipal Separate Storm Sewer System (MS4) Permit, Fort Belvoir, Directorate of Public Works, Environmental Division is accepting comments in writing on the draft Chloride Total Maximum Daily Load (TMDL) until 13 August 2023. These documents can be found at https://home.army.mil/.../director.../environmental division then click on "MS4 Stormwater Program". Links to all relevant documents can be found here. Submit comments by email to Ashley McMahon at ashley.c.mcmahon2.civ@army.mil or at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.	28-Jul-23	Facebook Post	135	0	0	1	0
REMINDER: DPW-Environmental Division is accepting comments in writing for: - Draft 2023 Chloride Total Maximum Daily Load (TMDL) Action Plan - Draft Polychlorinated Biphenyl (PCB) Total Maximum Daily Load (TMDL) Action Plan - Draft MS4 Program Plan Comments will be received until 13 August 2023. These documents can be found at https://home.army.mil/.../director.../environmental division then click on "MS4 Stormwater Program". Links to all relevant documents can be found here. Submit comments by email to Ashley McMahon at ashley.c.mcmahon2.civ@army.mil or at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.	4-Aug-23	Facebook Post	N/A	0	0	0	0
With Spotted Lanternflies now being seen throughout Fairfax County, Fort Belvoir Environmental would like to hear from anyone living or working on Belvoir who sees one here. Any details on location, vegetation, date, time, and severity would be appreciated. Please email any sightings to: brice.c.bartley@army.mil. More information at: https://www.fairfaxcounty.gov/.../spotted-lanternfly-seen...	15-Aug-23	Facebook Post	N/A	5	0	0	8
Check out our Stormwater Fall Newsletter! This article focuses on information on recognizing, responding, reporting, and recording of Spills and Discharges.	27-Sep-23	Facebook Post	148	0	0	0	0
Fall Foliage and Nutrient Stormwater Related Challenges While fall in Virginia presents us with cooler weather and breathtaking foliage, it also brings specific stormwater management challenges. Challenge: Fallen Leaves One of the most enchanting aspects of fall is the cascading leaves that adorn our surroundings. However, these fallen leaves have an unintended consequence: nutrient pollution. When rainwater washes over fallen leaves, it carries away essential nutrients like phosphorus and nitrogen. These nutrients then find their way into rivers and streams through our stormwater conveyance systems, causing detrimental effects such as harmful algal blooms, oxygen depletion, and harm to aquatic life. Solution: Be Mindful of Your LawnCare Keeping your yard debris-free can help mitigate nutrient runoff associated with leaves. Avoid piling leaves near storm drains when tending to your yard, as this can exacerbate nutrient pollution and lead to blockages and flooding during rain events. Also, avoid raking them into the street or sidewalks where they can be easily swept into the stormwater conveyance system. Do not leave your leaves once piled; compost them, or bag them up and dispose of them by placing them in your trash. Additionally, avoid over fertilizing your lawn or garden in the fall, as it can contribute to excess nutrients in our water systems. Save the nutrients for the spring when your garden wakes up and truly needs them. Practicing mindful lawn care during the fall allows us to cherish autumn's beauty while protecting our watersheds from excess nutrients. Have questions for the Stormwater Team? Reach out here or via their email address at usarmy.belvoir.id-sustainment.mbx.dpw-enrd.stormwater1@army.mil.	29-Sep-23	Facebook Post	186	1	0	0	0
Tune in for Fort Belvoir's Community Town Hall!	7-Nov-23	Facebook Post	N/A	0	0	0	0
The Fort Belvoir Christmas Bird Count will be held on Saturday 30 December 2023.	14-Dec-23	Facebook Post	N/A	8	0	0	4
Winter Weather and Watershed Health As winter approaches, it's crucial to be mindful of how our actions during colder weather can impact the environment. Here's why: - Accumulated snow and ice get contaminated with salt, litter, and other pollutants. When they thaw in the spring, these pollutants can clog storm drains and contaminated waterways. - Chloride, a major component of deicing salts, poses risks by harming aquatic life, degrading water quality, and contributing to infrastructure corrosion. High chloride levels in waterways can make them unsuitable for certain fish and aquatic species. - The Lower Accotink Creek Watershed includes parts of Fort Belvoir and has been identified as an impaired watershed impacted by chloride. Tweaking how you handle winter weather could help reduce the amount of chloride and other pollutants that enter the stormwater system at Fort Belvoir. Be eco-friendly this winter by implementing these tips: - Snow Placement Matters: Don't push or pile snow into storm drains. Shovel it onto lawns and other non-paved areas, letting it melt and infiltrate into the ground. - Adopt Eco-Friendly Deicers: Consider swapping traditional chemical deicers with eco and pet-friendly alternatives like sand or sawdust. Remember to sweep up and remove these deicers once ice has melted. - Salt Responsibility: Only use deicing salt when necessary, read the application directions and apply the minimal amount, sweep up any spilled, excess, or left over salt, and ensure proper storage and disposal. - Employ Electric Equipment: Use electricity, battery, or hybrid powered snow blowers to limit emissions and prevent oil or fuel spills. - Get Your Steps In: For small areas, like sidewalks, use good old-fashioned manpower to shovel or sweep snow off of the ground. - Adopt Energy Effiecient Heating: Limit vehicle warming and idling to under 3 minutes and consider switching from wood-burning to gas or electric sources to limit emissions. We challenge you to implement these easy changes to help maintain and protect our local waterways this winter. If you have questions or concerns about stormwater management at Fort Belvoir, reach out to our stormwater management team for more information at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.	19-Dec-23	Facebook Post	263	3	0	0	0
PUBLIC NOTICE: Fort Belvoir is seeking individuals interested in forming a Restoration Advisory Board (RAB), with the intent of sustaining military operations while mitigating threats to personnel, public health, and the environment. The Board will further inform future cleanup of Fort Belvoir properties associated with past military activity. Learn more at https://usg01.safelinks.protection.office365.us/...	28-Jun-24	Facebook Post	N/A	3	0	1	1
		Average:	**164**			**Total:**	**14**


Fort Belvoir Environmental Division
July 7, 2023
Check out our Summer Stormwater Newsletter. This article focuses on information on how your facility should prepare to respond to spills and how to minimize or eliminate exposure to the environment. Although we should all do our best to prevent spills... we are only human, it's bound to happen! So, let's make sure we are prepared to respond.
INDUSTRIAL
STORMWATER
POLLUTION PREVENTION
NEWSLETTER
ISSUE 20— JUNE 26, 2023
PERMIT REQUIREMENTS
Quarterly Routine Facility Inspection
DUE: JUNE 30th, 2023
One quarterly inspection per each permit cycle year MUST be done during or immediately after a rain event.
Q2 Inspections are still missing for:
12th Aviation—Brave Company
12th Aviation—Charlie Company
MWR—Golf Course Maintenance
MWR—Dogue Creek Marina
Tactical Wash Rack
FMS13 at Bldg. 1949
29th Infantry Division
TMP Motorpool
249th Engineering at Bldg. 190
MCTID—Marina
ISP/Verizon/Onelda
Email reports to Ashley Clark McMahon
ashley.c.mcmahon2.civ@army.mil
(703)-806-0627
Annual Pollution Prevention Training and Inspection
Its required once a year, so the sooner the better. My inspections counts towards your Quarterly requirements :)
Sign up with Camilo Dias ASAP!
cdias@bbch-llc.com
(676)-773-8048
SPILL PREVENTION AND RESPONSE
PREVENTION SHOULD BE THE FIRST STEP MEASURE
Maintain Good Housekeeping Practices,
Perform Preventative Maintenance,
Inspect Storage Areas Regularly
Use Structural Barriers to Prevent spills from Becoming Releases
BE PREPARED TO RESPOND
Have a fully stocked spill kit and know where it is located
Spill response materials should be easily accessible and in good condition
Employees should be trained on proper spill response methods and procedures
Refer to facility Master Spill Plan or Spill Prevention Control and Countermeasure (SPCC) Plan
ACT AND REPORT
Follow posted Spill Response Procedures
Survey the Incident from a Safe Distance,
Identify the Source of Release and the Material being Released
Contact the Fire Department and DPW-Environmental for assistance in containment
NOTE: Facility is responsible for Spill Clean-up and Mitigation
Spills greater than 5 gals OR if any amount that enters a storm drain, channel, or waterway should be reported to the Fire Department
ALL SPILLS SHOULD BE REPORTED TO ENVIRONMENTAL!
REPORT SPILL TO DPW - Environmental by Calling (703) 806-3694, E-mailing your Spill Incident Report to zachary.d.witman.civ@army.mil, OR Using Pollution Reporting Button on the Environmental Webpage
MINIMIZING AND ELIMINATING EXPOSURE
THE INDUSTRIAL STORMWATER PERMIT REQUIRES THAT MANUFACTURING, PROCESSING AND MATERIAL STORAGE AREAS SHALL BE LOCATED INSIDE, OR PROTECTED BY A STORM-RESISTANT COVERING TO PREVENT EXPOSURE TO RAIN, SNOW, SNOWMELT, AND RUNOFF TO THE MAXIMUM EXTENT PRACTICABLE.
FACILITIES SHOULD EVALUATE THEIR SITE AND OPERATIONS REGULARLY AND:
Store materials indoors or under a storm-resistant shelter to prevent exposure to stormwater. If materials must be stored outside, ensure they are HIGH and DRY by store them up off the ground and under cover
Consider use of hoppers, CONEX boxes, Sheds, Canopies, Awnings, Tarps (weighted down)
Conduct Operations, including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations indoors or under cover whenever possible
Keep materials and equipment away from storm inlets and drainage ditches
Keep roll-offs, dumpsters, and trash cans covered, secured, and leak proof
Inspect, Identify, and Repair leaking equipment/vehicles immediately
AT LEAST ONE INSPECTION A YEAR SHOULD BE COMPLETED DURING A RAIN EVENT...THIS IS A GREAT TIME TO ASSESS YOUR FACILITY AND SEE THE POLLUTANT SOURCES CONTRIBUTING TO RUNOFF CONTAMINATION!
HERE IT COMES AGAIN!... WHAT ARE THEY THINKING?
YEAH, EVERY TIME IT RAINS, MORE ROAD OIL, DOG POOP AND NASTY SPRAY!... I'M GETTIN' SICK!
WASH RACK ON MEADE ROAD IS CLOSED
VEHICLE & EQUIPMENT WASHING
DISCHARGES FROM WASHING OPERATIONS ARE NOT UNAUTHORIZED UNDER THE INDUSTRIAL STORMWATER PERMIT VA0092771
Aircraft, ground vehicle, runway, tactical vehicle, equipment, or surface wash-water, including tank cleaning operations are specifically not authorized by this permit.
The following measures (or their equivalents) should be considered:
Performing all cleaning operations indoors;
Covering the cleaning operation;
Ensuring that all wash waters drain to a proper collection system (i.e. sanitary sewer);
PERMIT REAPPLICATION
The current Industrial Stormwater Permit VA0092771 was set to expire 31 DEC 2021. The Virginia Department of Environmental Quality (VADEQ) has administratively continued the ISW permit. Fort Belvoir ISW tenants are required to comply with the terms and conditions of the existing permit until a new permit has been reissued by VADEQ.
CONTACTS
Need to contact the Industrial Stormwater Program?
Wilamena Grady Harback
1 share
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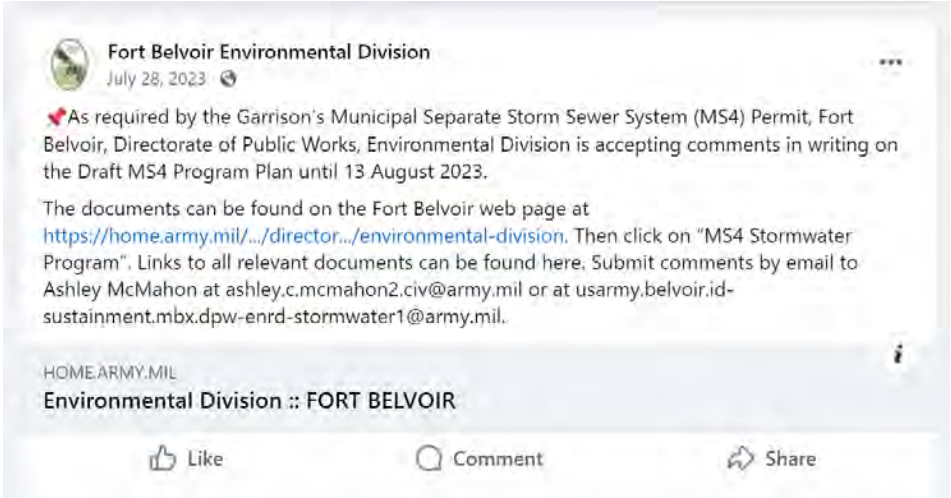
Fort Belvoir Environmental Division
July 28, 2023
As required by the Garrison's Municipal Separate Storm Sewer System (MS4) Permit, Fort Belvoir, Directorate of Public Works, Environmental Division is accepting comments in writing on the Draft MS4 Program Plan until 13 August 2023.
The documents can be found on the Fort Belvoir web page at https://home.army.mil/.../director.../environmental-division. Then click on "MS4 Stormwater Program". Links to all relevant documents can be found here. Submit comments by email to Ashley McMahon at ashley.c.mcmahon2.civ@army.mil or at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.
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Fort Belvoir Environmental Division
July 28, 2023
As required by the Garrison's Municipal Separate Storm Sewer System (MS4) Permit, Fort Belvoir, Directorate of Public Works, Environmental Division is accepting comments in writing on the draft 2023 Polychlorinated Biphenyl (PCB) Total Maximum Daily Load (TMDL) Action Plan until 13 August 2023.
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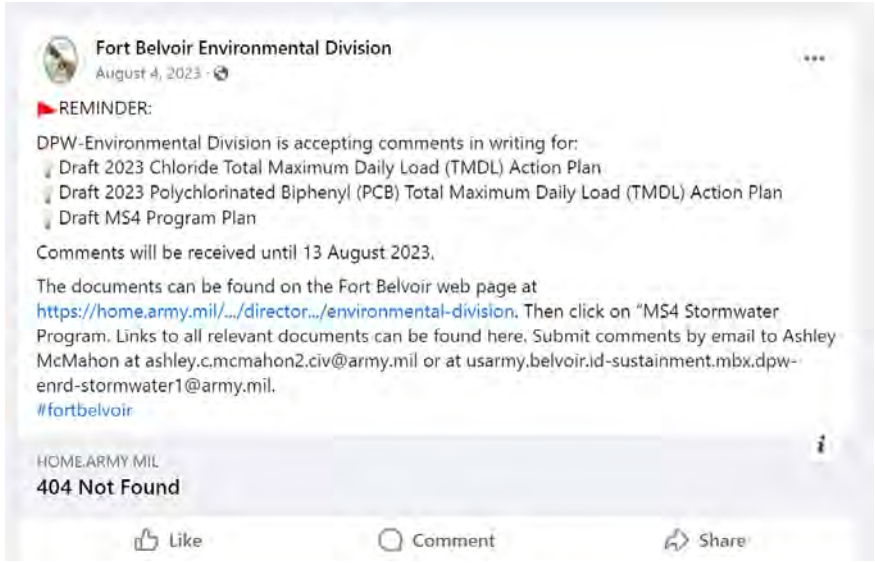
Fort Belvoir Environmental Division
August 4, 2023
REMINDER:
DPW-Environmental Division is accepting comments in writing for:
Draft 2023 Chloride Total Maximum Daily Load (TMDL) Action Plan
Draft 2023 Polychlorinated Biphenyl (PCB) Total Maximum Daily Load (TMDL) Action Plan
Draft MS4 Program Plan
Comments will be received until 13 August 2023.
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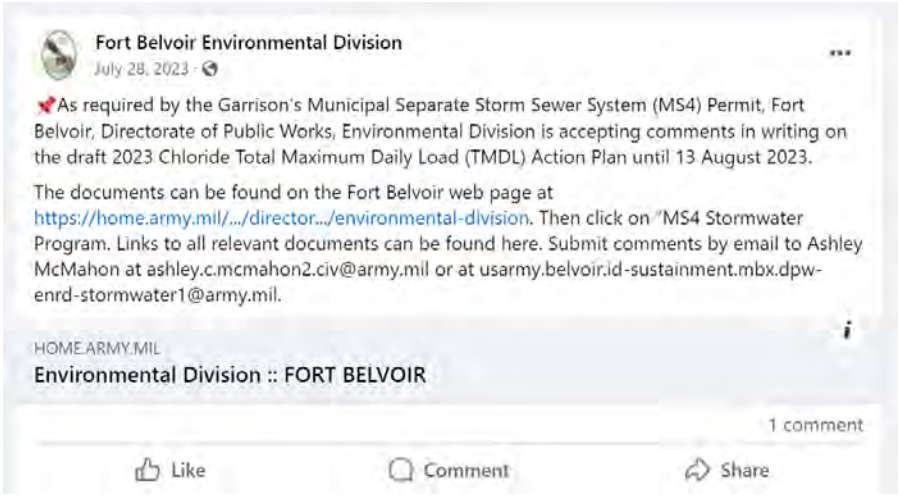
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1 comment
Like
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Fort Belvoir Environmental Division
August 15, 2023 ·

With spotted lantern fly now being seen throughout Fairfax County, Fort Belvoir Environmental would like to hear from anyone living or working on Belvoir who sees one here. Any details on location, vegetation, date, time, and severity would be appreciated. Please email any sightings to: brice.c.bartley.civ@army.mil

More information at: https://www.fairfaxcounty.gov/.../spotted-lanternfly-seen...

#fortbelvoir #fortbelvoirmwr #spottedlanternfly

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Fort Belvoir Environmental Division
September 27, 2023 ·

Check out our Stormwater Fall Newsletter! This article focuses on information on recognizing, responding, reporting, and recording of Spills and Discharges.

Like Comment Share

Fort Belvoir Environmental Division
September 29, 2023 ·

Fall Foliage and Nutrient Related Stormwater Challenges
While fall in Virginia presents us with cooler weather and breathtaking foliage, it also brings specific stormwater management challenges.

Challenge: Fallen Leaves
One of the most enchanting aspects of fall is the cascade of leaves that adorn our surroundings. However, these fallen leaves have an unintended consequence: nutrient pollution. When rainwater washes over fallen leaves, it carries away essential nutrients like phosphorus and nitrogen. These nutrients then find their way into our rivers and streams through our stormwater conveyance systems, causing detrimental effects such as harmful algal blooms, oxygen depletion, and harm to aquatic life.

Solution: Be Mindful of Your Lawn Care
Keeping your yard-debris free can help mitigate nutrient runoff associated with leaves. Avoid piling leaves near storm drains when tending to your yard, as this can exacerbate nutrient pollution and lead to blockages and flooding during rain events. Also, avoid raking them into the street or sidewalks where they can be easily swept into the stormwater conveyance system. Do not leave your leaves once piled; compost them, or bag them up and dispose of them by placing them in your trash. Additionally, avoid over fertilizing your lawn or garden in the fall, as it can contribute to excess nutrients in our water systems. Save the nutrients for the spring when your garden wakes up and truly needs them.

Practicing mindful lawn care during the fall allows us to cherish autumn's beauty while protecting our watersheds from excess nutrients.
Have questions or comments for the Stormwater Team? Reach out here or via their email address at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.

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Fort Belvoir Environmental Division
November 7, 2023 ·

Tune in now for Fort Belvoir's Community Town Hall!

Fort Belvoir was live.
November 7, 2023 ·

HAPPENING NOW: Quarterly Community Housing Town Hall

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Fort Belvoir Environmental Division
December 14, 2023 ·

The Fort Belvoir Christmas Bird Count will be held on Saturday, Dec 30, 2023.

Fort Belvoir's Annual Christmas Bird Count

Calling All Birders!

The Fort Belvoir Christmas Bird Count (CBC) will be held on Saturday Dec 30, 2023. This annual count is one of the oldest in the area dating back to 1911, helping us understand wintering bird populations, and is sponsored by National Audubon Society.

Novice birders as well as experts should consider participating in this year's event! New to the world of birds? No worries! Novices will be teamed up with seasoned birders, for an invaluable learning experience.

Choose as many time slots as you would like to participate in:
5:00am—7:00 am (Owls in the Dark)
7:00am—12:00 pm (Morning Wake Up Call)
1:00pm—5:00pm (Afternoon Flying Around)

Meeting location will be at Accotink Bay Wildlife Refuge Environmental Education Center for all start times (5am, 7am, and 1pm)

Contact:
Kevin Walter at kevin.e.walter8.civ@army.mil or 703-915-5682 to register.

8 4 shares

Like Comment Share

Fort Belvoir Environmental Division
December 19, 2023 ·

Winter Weather and Watershed Health

As winter approaches, it's crucial to be mindful of how our actions during colder weather can impact the environment. Here's why:

- Accumulated snow and ice get contaminated with salt, litter, and other pollutants. When they thaw in the spring, these pollutants can clog storm drains and contaminated waterways.

- Chloride, a major component of deicing salts, poses risks by harming aquatic life degrading water quality, and contributing to infrastructure corrosion. High chloride levels waterways can make then unsuitable for certain fish and aquatic species.

- The Lower Accotink Creek Watershed includes parts of Fort Belvoir and has been identified as an impaired watershed impacted by chloride.

Tweaking how you handle winter weather could help reduce the amount of chloride and other pollutants that enter the stormwater system at Fort Belvoir. Be eco-friendly this winter by implementing these tips:

- Snow Placement Matters: Don't push or pile snow onto storm drains. Shovel it onto lawns and other non-paved areas, letting it melt and infiltrate into the ground.

- Adopt Eco-Friendly Deicers: Consider swapping traditional chemical deicers with eco and pet-friendly alternatives like sand or sawdust. Remember to sweep up and remove these deicers once ice has melted.

- Salt Responsibly: Only use deicing salt when necessary, read the application directions and apply the minimal amount, sweep up any spilled, excess, or left over salt, and ensure proper storage and disposal.

- Employ Electric Equipment: Use electric, battery, or hybrid powered snow blowers to limit emissions and prevent oil or fuel spills.

- Get Your Steps In: For small areas, like sidewalks, use good old-fashioned manpower to shovel or sweep snow off the ground.

- Adopt Energy Efficient Heating: Limit vehicle warming and idling to under 3 minutes and consider switching from wood-burning to gas or electric heat sources to limit emissions.

We challenge you to implement these easy changes to help maintain and protect our local waterways this winter. If you have questions or concerns about stormwater management at Fort Belvoir, reach out to our stormwater management team for more information at usarmy.belvoir.id-sustainment.mbx.dpw-enrd-stormwater1@army.mil.

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Fort Belvoir Environmental Division
June 28 ·
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2024

APPENDIX D

OUTFALL INSPECTION SUMMARY

FORT BELVOIR 2023-2024 MS4 ANNUAL REPORT
PERMIT NO. VAR040093

Outfall Information		Outfall Description and Conditions								Flow Characterization																			Physical Indicators at Flowing Outfalls						
Outfall ID	Illicit Discharge Characterization	Outfall Type	Pipe Material	Pipe Shape	Number of Pipes	Pipe Dimensions	Submerged in Water?	Buried in Sediment?	Amount of Water/Sediment	Flow Present?	Sample Taken?	Sample Taken From?	Flow Measurement	Volume (mL)	Time to fill (sec)	Flow depth (in)	Length (in)	Width (in)	Time of Travel (sec)	Flow Rate (cfs)	Water Temp	pH	Ammonia (mg/L)	Fluoride (mg/L)	Phosphorus (mg/L)	Free Cl (mg/L)	Total Cl (mg/L)	Nitrate	Nitrite	Indicators in Flow?	Odor	Odor Severity	Color	Color Severity	Turbidity	Floatables
984	Obvious	Closed Pipe	RCP	Circular	Single	30"	Not Submerged	Not Buried	-	Moderate	Yes	Flow	Time of Movement	-	-	0.25"	12"	4"	1.9 sec	0.00365	51.4	7.01	0.00	0.3	0.88	0.02	0.04	3.4	0.010	-	-	-	-	-	-	-
5050	Potential	Closed Pipe	Steel	Circular	Single	30"	Not Submerged	Not Buried	-	Moderate	Yes	Pool	Time of Movement	-	-	0.25"	12"	5.5"	1.44 sec	0.00662	54	5.53	0.00	0.00	0.03	0.02	0.01	0.50	0.004	Color	-	-	Yellow	Faint	-	-
6951	Potential	Closed Pipe	RCP	Circular	Single	36"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	-	-	-	-	-	-	-	-	49.3	6.47	0.49	0.00	0.08	0.03	0.03	1.60	0.012	Color	-	-	Yellow	Faint	-	-
7272	Potential	Closed Pipe	Steel	Circular	Single	22"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	Time of Movement	-	-	0.2"	12"	5"	1.13 sec	0.00615	52.5	6.85	0.00	0.00	0.08	0.00	0.04	1.00	0.004	-	-	-	-	-	-	-
2992	Suspect	Closed Pipe	Steel	Circular	Single	18"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7221	Unlikely	Closed Pipe	RCP	Circular	Single	36"	Partially Submerged	Not Buried	0.5" water	Trickle	-	-	-	-	-	-	-	-	-	-	48.3	6.36	0.00	0.00	0.06	0.05	0.07	0.60	0.016	Color	-	-	Orange	Faint	-	-
6843	Unlikely	Closed Pipe	RCP	Circular	Single	30"	Not Submerged	Not Buried	-	Trickle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7208	Unlikely	Closed Pipe	RCP	Circular	Single	18" D and H, 36" flared end	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5542	Unlikely	Closed Pipe	RCP	Circular	Single	14"	Partially Submerged	Not Buried	3" water	Trickle	Yes	Pool	-	-	-	-	-	-	-	-	53.1	6.96	0.12	0.1	0.04	0.01	0.05	1.2	0.017	-	-	-	-	-	-	-
6220	Unlikely	Closed Pipe	PVC	Circular	Single	8"	Not Submerged	Not Buried	-	Trickle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6445	Unlikely	Closed Pipe	PVC	Circular	Single	14"	Not Submerged	Not Buried	-	Moderate	Yes	Flow	Time of Movement	-	-	1.25"	12"	2"	1.64 sec	0.01059	53.9	6.98	0.00	0.00	0.04	0.00	0.03	0.90	0.003	-	-	-	-	-	-	-
6935	Unlikely	Closed Pipe	Unknown	Unknown	Unknown	Unknown	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2490	Unlikely	Closed Pipe	RCP	Circular	Single	18"	Partially Submerged	Not Buried	5" water	Moderate	Yes	Flow	Time of Movement	-	-	2"	12"	3"	1.86 sec	0.02287	56	6.52	0.01	0.1	0.27	0.00	0.04	0.7	0.012	-	-	-	-	-	-	-
2522	Unlikely	Closed Pipe	RCP	Parabolic	Single	6" D x 48" W	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5043	Unlikely	Closed Pipe	RCP	Circular	Single	12"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2519	Unlikely	Closed Pipe	CMP	Circular	Single	18"	Not Submerged	Not Buried	-	Moderate	Yes	Flow	Time of Movement	-	-	0.2"	12"	16"	1.94 sec	0.01118	49.8	6.98	0.00	0.00	0.08	0.01	0.01	0.9	0.003	-	-	-	-	-	-	-
5379	Unlikely	Closed Pipe	RCP	Circular	Double	12" both pipes	Not Submerged	Not Buried	-	Moderate	Yes	Flow	Time of Movement	-	-	0.25"	12"	4.5"	1.97 sec	0.00396	48.3	6.76	0.04	0.00	0.18	0.02	0.06	1.6	0.003	Color	-	-	Yellow	Faint	-	-
5373	Unlikely	Closed Pipe	PVC	Circular	Single	12"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	-	-	-	-	-	-	-	-	48	6.78	0.17	0.00	0.12	0.05	0.1	0.60	0.001	-	-	-	-	-	-	-
5338	Unlikely	Closed Pipe	PVC	Circular	Double	12" both pipes	Partially Submerged	Not Buried	6" in water	-	Yes	Pool	-	-	-	-	-	-	-	-	54	6.59	0.09	0.00	0.10	0.07	0.07	0.5	0.007	Color	-	-	Yellow	Faint	-	-
3351	Unlikely	Closed Pipe	CMP	Circular	Single	36"	Not Submerged	Partially buried	1.5" sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3352	Unlikely	Closed Pipe	RCP	Circular	Single	18"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3776	Unlikely	Closed Pipe	Steel	Circular	Single	12"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Outfall Information			Physical Indicators at Flowing and Non-Flowing Outfalls				Maintenance Tracker		
Outfall ID	Illicit Discharge Characterization	Floatables Severity	Indicators Not Related to Flow?	Indicator Description	Indicator Comments	Notes	Work Order Number	Date Submitted	Status
984	Obvious	-	Deposits/Stains, Pipe Benthic Growth	Green	Flow line exhibited a greenish color and potential algae growth found growing along bottom portion of pipe.	IDDE Report 22-41 is currently opened for this outfall and identified a roof drain illicit connection to storm. Outfall was flowing at time of inspection and flow line exhibited a greenish color due to moss growth. Receiving channel very eroded and exhibits sever undercutting. Flow sample taken. Nitrate levels were measured at 3.4 mg/L which exceeds the benchmark value of 2.2 mg/L. Further investigation will need to occur to determine the source of the high nitrate levels.			
5050	Potential	-	Deposits/Stains, Poor Pool Quality, Pipe Benthic Growth	Flow Line, Suds, Orange	Pipe flow line had a reddish-orange color and iron flocc and suds present.	Lots of iron flocc and biological sheen present. Suds observed near pipe opening. Pool sample taken. Flow most likely due to the 0.8" of rain received on 3/9/2024. No photos taken due to being in a secure area. The pH was determined to be below the benchmark range of 6.0 to 9.0 Standard Units (S.U.). Trunk investigation was performed and no known pollutant source that lowers pH was observed. Since the pH during the 2022-2023 ORI was below the benchmark range, it can be assumed that a natural source is causing the pH of the water to be more acidic (e.g., decaying organic matter, presence of iron, etc.) and the outfall will need to be periodically screened to confirm the low pH was due to biological factors.	-	-	No Repairs Required
6951	Potential	-	Deposits/Stains, Poor Pool Quality, Pipe Benthic Growth	Flow Line, Suds, Sheen, Orange	Reddish-Orange color to flow line and biological sheen and iron flocc present.	Pool sample taken. Lots of iron flocc and biological sheen observed and suds present. Diesel Range Organics (DRO) was present in samples taken last year, however no physical indications of hydrocarbons were present. Will schedule hydrocarbons testing to confirm this. No detergents indicated after testing that was performed on 3/21/2024. Elevated nitrate and ammonia levels found in sample at 1.6 mg/L and 0.49 mg/L, respectively. These values are close to the benchmark of 2.2 mg/L and 1.0 mg/L, respectively. Samples for hydrocarbons testing were not taken due to the area being inaccessible from the massive growth of vegetation and steep drop, so this testing will be scheduled for the 2024-2025 ORI.	-	-	No Repairs Required
7272	Potential	-	Outfall Damage, Poor Pool Quality	Spalling, Cracking, or Chipping, Excessive Algae	Minor damage to the concrete structure and pool exhibited a greenish color (potential algae).	Pool sample taken. Pool exhibited a greenish color (potential algae). Flow most likely due to the 0.8" of rain received on 3/9/2024. Minor damage to the concrete structure.			
2992	Suspect	-	Deposits/Stains	Other	Lots of sediment from storm runoff found inside pipe and within receiving channel.	Lots of sediment from storm runoff found inside and directly outside the pipe. Trash found scattered around the immediate area. Will investigate further to see if there is an eroded area upstream of outfall causing sediment to flow through the pipe and into receiving channel.	-	-	No Repairs Required
7221	Unlikely	-	Blockage	Tree Litter	Lots of pine needles and tree litter right at the pipe opening.	Approximately 0.5" of standing water inside the pipe. Lots of pine needles and tree litter right at the pipe opening. Shallow pool present with lots of decaying organic matter. Outfall drains large retention pond to the north. Pool sample taken and sediment present in sample, giving off a brownish-orange color. Overall in good condition.			
6843	Unlikely	-	Poor Pool Quality, Pipe Benthic Growth	Sheen, Orange	Biological sheen and iron flocc present.	Some iron flocc and biological sheen, tree litter present. Trickle flow present and was too slow to measure or take a sample. Flow most likely due to the 0.8" of rain received on 3/9/2024. Receiving channel is fully vegetated and channel is washed out. No photos due to being in a secure area.	-	-	No Repairs Required
7208	Unlikely	-	-	-	-	Good condition, little bit of trash found. Trickle flow present and was too slow to measure or take a sample. Flow most likely due to the 0.8" of rain received on 3/9/2024.	-	-	No Repairs Required
5542	Unlikely	-	-	-	-	Good condition, little bit of trash found. The pipe was observed to be flowing, however flow was too slow to take measurements. Pipe was submerged in about 3" standing water. Pool sample taken. Flow most likely due to the 0.8" of rain received on 3/9/2024. No photos due to being in a secure area.			
6220	Unlikely	-	Poor Pool Quality	Excessive Algae	Algae found growing near pipe opening.	Outfall observed to be flowing, though exhibited a trickle flow which was too slow to take a measurement. Some algae found near the pipe opening. Flow most likely due to the 0.8" of rain received on 3/9/2024. Overall outfall is in good condition. No photos due to being in a secure area.	-	-	No Repairs Required
6445	Unlikely	-	-	-	-	Flow sample taken. Area was investigated and flow determined to be a result of the 0.8" of rain received on 3/9/2024. No photos due to being in a secure area. Outfall in good condition.	-	-	No Repairs Required
6935	Unlikely	-	-	-	-	This outfall no longer exists and it most likely has been replaced by another outfall due to ongoing construction project. Will confirm once project is closed and list of permanent stormwater structures are provided. No photos due to being in a secure area.	-	-	No Repairs Required
2490	Unlikely	-	-	-	-	Outfall observed to have about 5" of standing water present. Pool sample taken. Flow most likely due to the 0.8" of rain received on 3/9/2024. No photos taken due to being in a secure area. During the previous outfall investigation for the 2022-2023 Year 5 ORI, the pH was determined to be at 5.6 Standard Units (S.U.) which was outside the benchmark range of 6.0 to 9.0 S.U. The pH was measured again during the current ORI Year 1 cycle (2023-2024) and was determined to be 6.52 which is within the benchmark range.	-	-	No Repairs Required
2522	Unlikely	-	-	-	-	Outfall in good condition, no photos due to being in a secure area.	-	-	No Repairs Required
5043	Unlikely	-	Outfall Damage	Structural Damage	Receiving channel for outfall is heavily eroded and is a steep drop from the edge of the outfall structure.	Receiving channel for outfall heavily eroded and steep drop from the outfall concrete apron down to the channel. No photos taken due to being in a secure area.			
2519	Unlikely	-	Outfall Damage, Poor Pool Quality, Pipe Benthic Growth	Structural Damage, Sheen, Orange	Severe erosion and undercutting of receiving channel, biological sheen, and iron flocc present.	Severe channel erosion and undercutting with damage to the headwall. Iron flocc and a biological sheen present in flow. Flow sample taken. Outfall was flowing during the 2022-2023 ORI. No photos taken due to being in a secure area. During the previous outfall investigation for the 2022-2023 Year 5 ORI, the pH was determined to be at 5.32 Standard Units (S.U.) which was outside the benchmark range of 6.0 to 9.0 S.U. The pH was measured again during the current ORI Year 1 cycle (2023-2024) and was determined to be 6.98 which is within the benchmark range.			
5379	Unlikely	-	-	-	-	Flow sample taken. Discharges directly into wetland and contains two pipes (pipes A and B). Outfall in good condition. Sample contained elevated nitrate levels (1.6 mg/L) which is close to the benchmark of 2.2 mg/L.	-	-	No Repairs Required
5373	Unlikely	-	Deposits/Stains, Poor Pool Quality	Flow Line, Excessive Algae	Flow line exhibited a a dark green color and lots of algae found inside the pipe and within the pool.	Flow present, pool sample taken as flow was too slow. Algae found near pipe opening and lots of decaying organic matter observed in channel. Discharges directly into wetlands. Overall good condition.	-	-	No Repairs Required
5338	Unlikely	-	-	-	-	No flow, pool sample taken. Approximately 6" of standing water present. Discharges directly into adjacent wetlands. Overall in good condition.	-	-	No Repairs Required
3351	Unlikely	-	-	-	-	No flow, about 1.5" of sediment inside pipe. Receiving channel full of leaf litter and debris. Overall in good condition.	-	-	No Repairs Required
3352	Unlikely	-	Outfall Damage	Spalling, Cracking, or Chipping	The outfall structure exhibits some cracks in the concrete.	No flow, structure exhibits some cracks in the concrete.			
3776	Unlikely	-	-	-	-	Trash observed in receiving channel and is overgrown with vegetation. Overall in good condition.	-	-	No Repairs Required

Outfall Information		Outfall Description and Conditions								Flow Characterization																		Physical Indicators at Flowing Outfalls						
Outfall ID	Illicit Discharge Characterization	Outfall Type	Pipe Material	Pipe Shape	Number of Pipes	Pipe Dimensions	Submerged in Water?	Buried in Sediment?	Amount of Water/Sediment	Flow Present?	Sample Taken?	Sample Taken From?	Flow Measurement	Volume (mL)	Time to fill (sec)	Flow depth (in)	Length (in)	Width (in)	Time of Travel (sec)	Flow Rate (cfs)	Water Temp	pH	Ammonia (mg/L)	Fluoride (mg/L)	Phosphorus (mg/L)	Free Cl (mg/L)	Total Cl (mg/L)	Nitrate	Nitrite	Indicators in Flow?	Odor	Odor Severity	Color	Color Severity	Turbidity	Floatables
7271	Unlikely	Closed Pipe	Steel	Circular	Single	15"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7273	Unlikely	Closed Pipe	Steel	Circular	Single	12"	Partially Submerged	Not Buried	6" in water	Trickle	Yes	Pool	-	-	-	-	-	-	-	49.9	6.67	0.00	0.00	0.18	0.00	0.07	1.1	0.010	Color	-	-	Yellow	Faint	-	-
2533	Unlikely	Closed Pipe	HDPE	Circular	Double	15", 15"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3822	Unlikely	Closed Pipe	RCP	Circular	Single	24" W, 40" L, flared end 48"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3818	Unlikely	Closed Pipe	RCP	Circular	Single	18"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	-	-	-	-	-	-	-	50.5	6.52	0.04	0.00	0.08	0.03	0.06	0.2	0.014	-	-	-	-	-	-	-
3819	Unlikely	Closed Pipe	RCP	Circular	Single	15"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3872	Unlikely	Closed Pipe	Unknown	Unknown	Unknown	Unknown	Not Submerged	Completely Buried	100% sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3867	Unlikely	Closed Pipe	RCP	Circular	Single	15"	Not Submerged	Partially buried	6" sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4217	Unlikely	Closed Pipe	RCP	Circular	Single	24"	Partially Submerged	Not Buried	3" in water	Moderate	Yes	Flow	Time of Movement	-	-	0.25"	12"	2"	0.84 sec	0.00413	51.8	6.34	0.00	0.00	0.14	0.00	0.00	0.80	0.003	-	-	-	-	-	-	-
4215	Unlikely	Closed Pipe	RCP	Circular	Single	42"	Not Submerged	Not Buried	-	Trickle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4214	Unlikely	Closed Pipe	RCP	Circular	Single	15"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	-	-	-	-	-	-	-	-	50.3	6.98	0.04	0.2	0.17	0.03	0.04	0.00	0.004	-	-	-	-	-	-	-
4212	Unlikely	Closed Pipe	Steel	Circular	Single	21.5"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4208	Unlikely	Closed Pipe	RCP	Circular	Single	36"	Partially Submerged	Not Buried	9" in water	-	Yes	Pool	-	-	-	-	-	-	-	-	47.7	7.02	0.08	0.00	0.06	0.00	0.04	0.5	0.005	Color	-	-	Yellow	Faint	-	-
234	Unlikely	Closed Pipe	HDPE	Circular	Single	30"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
216	Unlikely	Closed Pipe	HDPE	Circular	Single	18"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	Unlikely	Closed Pipe	RCP	Circular	Single	42"	Partially Submerged	Not Buried	4" in water	Moderate	Yes	Flow	Time of Movement	-	-	6"	12"	31"	5.67 sec	0.2273	51.5	6.72	0.02	0.10	0.03	0.00	0.04	1.00	0.008	-	-	-	-	-	-	-
405	Unlikely	Closed Pipe	HDPE	Circular	Single	22"	Not Submerged	Not Buried	-	Substantial	Yes	Flow	Time of Movement	-	-	0.5"	12"	7"	1.18 sec	0.02058	52.6	6.45	0.02	0.00	0.05	0.01	0.04	1.5	0.011	Color	-	-	Yellow	Faint	-	-
257	Unlikely	Closed Pipe	RCP	Circular	Single	16"	Not Submerged	Partially buried	8" sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3290	Unlikely	Closed Pipe	Unknown	Unknown	Unknown	Unknown	Not Submerged	Completely Buried	100% sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3291	Unlikely	Closed Pipe	RCP	Unknown	Single	Unknown	Not Submerged	Completely Buried	100% sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
268	Unlikely	Closed Pipe	RCP	Elliptical	Single	55" x 39"	Not Submerged	Not Buried	-	Moderate	Yes	Pool	Time of Movement	-	-	0.25"	12"	9"	0.88 sec	0.01772	52.3	6.51	0.22	0.00	0.11	0.04	0.04	1.00	0.005	-	-	-	-	-	-	-
266	Unlikely	Closed Pipe	HDPE	Circular	Single	24"	Not Submerged	Not Buried	-	Trickle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
969	Unlikely	Closed Pipe	RCP	Circular	Single	12"	Not Submerged	Not Buried	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7870	Unlikely	Closed Pipe	HDPE	Circular	Single	15"	Partially Submerged	Not Buried	0.5" in water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1526	Unlikely	Closed Pipe	CMP	Circular	Single	36"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	-	-	-	-	-	-	-	-	47	6.67	0.03	0.00	0.07	0.02	0.02	1.2	0.006	-	-	-	-	-	-	-
2025	Unlikely	Closed Pipe	Unknown	Unknown	Unknown	Unknown	Not Submerged	Completely Buried	100% sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3008	Unlikely	Closed Pipe	HDPE	Circular	Single	12"	Not Submerged	Partially buried	6" sediment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
322	Unlikely	Closed Pipe	CMP	Circular	Single	18"	Not Submerged	Not Buried	-	Trickle	Yes	Pool	-	-	-	-	-	-	-	-	51.3	6.83	0.02	0.00	0.02	0.07	0.07	1.40	0.006	-	-	-	-	-	-	-

Outfall Information			Physical Indicators at Flowing and Non-Flowing Outfalls					Maintenance Tracker		
Outfall ID	Illicit Discharge Characterization	Floatables Severity	Indicators Not Related to Flow?	Indicator Description	Indicator Comments	Notes	Work Order Number	Date Submitted	Status
7271	Unlikely	-	-	-	-	Overall in good condition. Heavy moss growth in receiving channel which may help with slowing down flow during rain events.	-	-	No Repairs Required
7273	Unlikely	-	Poor Pool Quality, Pipe Benthic Growth	Sheen, Orange	Biological sheen and iron flocc present.	Pool sample taken. Outfall is submerged in about 6" of standing water. Iron flocc and biological sheen present in the water. Pool most likely due to the 0.8" of rain received on 3/9/2024.	-	-	No Repairs Required
2533	Unlikely	-	-	-	-	Some leaf litter scattered between the two pipes, some decaying organic matter observed. Outfall drains to a gabion basket. Overall in good condition.	-	-	No Repairs Required
3822	Unlikely	-	-	-	-	Some leaf litter found inside the flared portion of the outfall. Overall in good condition.	-	-	No Repairs Required
3818	Unlikely	-	-	-	-	Slow flow present, pool sample taken. Large tree wedged in between the riprap found in the receiving channel. Flow most likely due to the 0.8" of rain received on 3/9/2024. Overall in good condition.	-	-	No Repairs Required
3819	Unlikely	-	-	-	-	Outfall discharges to concrete channel. Receiving channel filled with leaf litter and vegetation. Overall in good condition.	-	-	No Repairs Required
3872	Unlikely	-	Blockage	Sediment	Assumed the outfall is completely buried and unable to be located.	Outfall either removed or completely buried in sediment as it was unable to be located.	-	-	No Repairs Required
3867	Unlikely	-	Abnormal Vegetation, Blockage	Excessive, Sediment	Area very overgrown with vegetation and pipe is about 50% buried in sediment and leaf litter.	Pipe is about buried in about 6" of leaf litter and sediment. Area very overgrown with vegetation and riprap washed out of receiving channel.			
4217	Unlikely	-	Outfall Damage	Structural Damage	Receiving channel is heavily eroded.	Outfall flowing and flow sample taken. Discharges from BMP 4064 which was full at time of inspection. Receiving channel heavily eroded.			
4215	Unlikely	-	-	-	-	Tree litter found concentrated near the pipe opening. Outfall drains bioretention pond on other side of fence of Lewis Village. Overall in good condition.	-	-	No Repairs Required
4214	Unlikely	-	Outfall Damage, Pipe Benthic Growth	Structural Damage, Green	Outfall headwall structure exhibits some damage and lots of algae found in and around the outfall pipe.	Lots of moss and algae found in and around the outfall pipe. Area is very overgrown with vegetation. Pool sample taken. Outfall headwall structure exhibits some damage.			
4212	Unlikely	-	-	-	-	Receiving channel for outfall contains a lot of debris including wood planks and trash and is very overgrown with vegetation, however the vegetation is not blocking the flow path. Overall in good condition.	-	-	No Repairs Required
4208	Unlikely	-	-	-	-	About 9" of standing water present inside of the pipe, and no flow observed. Lots of decaying organic matter at bottom of channel. Pool sample taken. Overall in good condition.	-	-	No Repairs Required
234	Unlikely	-	-	-	-	Headwall structure in good condition. Receiving channel covered in leaf litter and level spreader at base of hill is washed out.			
216	Unlikely	-	Outfall Damage	Structural Damage	Receiving channel is heavily eroded.	Headwall structure in good condition. Receiving channel is exhibiting some erosion. The channel should be regraded and stabilized to prevent further erosion from occurring.			
35	Unlikely	-	Poor Pool Quality	Other	Lots of decaying organic matter found at bottom of channel.	Pipe is partially submerged in about 4" of water and lots of decaying organic matter found at bottom of channel. Flow sample taken. Abundance of fish observed in channel. Outfall discharges into Dogue Creek. Overall in good condition.	-	-	No Repairs Required
405	Unlikely	-	Deposits/Stains, Poor Pool Quality	Flow Line, Colors	Flow line exhibited a greenish color and pool appeared to be a misty blueish-green, most likely due to algal growth.	Outfall found to be flowing at time of inspection with the flow line a greenish color (likely due to moss/algae). Outfall discharges directly into Dogue Creek and the pool appeared to have a light blueish color. Minnows present in pool and outfall is next to a populat fishing spot. Flow sample taken. Overall in good condition.	-	-	No Repairs Required
257	Unlikely	-	Blockage	Sediment, Tree Litter	8" buried in sediment and tree litter.	Outfall very overgrown with vegetation and is buried in about 8" of sediment. Receiving channel flows into Dogue Creek and is filled with leaf litter.			
3290	Unlikely	-	Blockage	Sediment, Tree Litter	Outfall is completely buried.	Outfall was completely buried and only the headwall structure was visible. Receiving channel in good condition.			
3291	Unlikely	-	Blockage	Sediment, Tree Litter	Outfall is completely buried.	Outfall was completely buried and only the headwall structure was visible. Receiving channel in good condition.			
268	Unlikely	-	Deposits/Stains, Poor Pool Quality	Flow Line, Excessive Algae	Flow line exhibited a greenish color and pool exhibited a misty blueish-green color indicating possible algal growth.	Flow present and flow line exhibiting a greenish color due to algae growth. Pool appears to be a light blueish color and was completely full. Pool was fairly turbid, however the flow from the pipe opening was clear. Pool sample taken. Overall in good condition.	-	-	No Repairs Required
266	Unlikely	-	Deposits/Stains, Poor Pool Quality, Pipe Benthic Growth	Flow Line, Sheen, Orange	Flow line exhibited a reddish-orange color due to the high iron content, biological sheen and iron flocc present.	Lots of iron flocc and biological sheen present in flow. Flow was very minimal and no sample was taken. Flow line exhibited a reddish-orange color due to the high iron content. Overall in good condition.	-	-	No Repairs Required
969	Unlikely	-	Outfall Damage	Structural Damage	Outfall receiving channel heavily eroded.	Receiving channel of outfall is heavily eroded and has created a large gully. Channel should be regraded and stabilized to prevent further erosion.			
7870	Unlikely	-	-	-	-	Small amount of standing water in pipe, about 0.5". Receiving channel contains a lot of leaf litter. Overall in good condition.	-	-	No Repairs Required
1526	Unlikely	-	Outfall Damage, Pipe Benthic Growth	Corrosion, Green	Bottom portion of pipe is rusted and moss/algae found in the flow and in the receiving channel.	Lots of rust found within the flow and inside the pipe. Moss/algae found in the flow and in the receiving channel. Pool sample taken. Overall in good condition.	-	-	No Repairs Required
2025	Unlikely	-	Blockage	Sediment	Outfall completely buried.	Outfall is completely buried and is barely visible under the overgrown vegetation.			
3008	Unlikely	-	Outfall Damage, Blockage	Spalling, Cracking, or Chippin, Blockage	Heavy damage on the concrete structure and about 50% of the pipe is buried in sediment.	Heavy damage on the concrete structure and buried in about 6" of sediment.			
322	Unlikely	-	Outfall Damage, Deposits/Stains, Pipe Benthic Growth	Corrosion, Flow Line, Green	Pipe was exhibiting some rusting along the bottom portion, rusty flow line, and moss or algae observed along the bottom portion of the pipe.	Bottom of pipe is fairly rusted and was found to be flowing. Leaf litter found inside and at the opening of the pipe. Moss or algae found moving down the flow path and into the receiving channel. Pool sample taken.			

2024

APPENDIX E

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) INCIDENT TRACKING TABLE

FORT BELVOIR 2023-2024 MS4 ANNUAL REPORT
PERMIT NO. VAR040093

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
19-09	8/10/2018	Direct Notification	4895, 4889	This is an ISW SWPPP facility. No illicit discharge reported, but facility personnel showed concern about the potential for trench drains running along the hangar bay doors for Building 3126 to be connected to the storm sewer system	Dye testing was conducted and an IJO was drafted along with the report findings. Tenant needs to submit an IJO to connect all building drains to the sanitary sewer. 4/26/22: Follow up email sent to ISW Program Manager about IJO. 5/27/22: PWO DA4283 NV-22035-2J draft created and submitted to project proponent for signature. 6/7/22: PWO DA4283 NV-22035-2J submitted by project proponent to DPW. 6/27/22: PWO DA4283 NV-22035-2J design approved and signed. Project Work Manager assigned, Edwin Brown, Edwin.l.brown66.civ@army.mil. 8/25/22: Follow up email sent to Edwin Brown to check on status of project, Mr. Brown responded and stated the PWO has been submitted to Aleut and is waiting on an estimate to come back. 10/10/22: Follow up email sent to Edwin Brown to check on status of project. Edwin Brown Responded 10/11/22 stating that we are still waiting on estimate to come back from Aleut. 1/3/23: Follow up email sent to Edwin Brown to check on status of PWO NV 22035-2J. Response received stating estimate is nearing final stages and should be completed in the coming weeks. 5/15/23: Sent follow up email to Edwin Brown, he stated the estimate from Aleut was received. We are waiting on final confirmation from Aleut so AW can begin work.	Valid Report/Potential Illicit Discharge/Corrective Actions Required	Open	
20-30	6/3/2020	Windshield Inspection	BMP 2535	AAFES: Discharge of a gray, turbid, liquid with a strong odor, leaking from dumpster. Liquid is a mix of liquids and garbage after being compacted. The spill flowed directly east away from the building down the ramp through a curb cut and into BMP 3251 via rip-rap pre-treatment. Liquid was thin and entered the Bioretention Unit. The liquid had a very strong rancid odor.	This is the second illicit discharge originating from this dumpster in less than a month (12-May-2020). Ensure that all leaked liquid is soaked up with absorbent pads and disposed of properly. Ensure that boom is place across curb cuts to BMP to ensure no further contamination. Area should be washed clean once all leaked liquid is soaked up with absorbent. Repair or replace leaking trash compactor. 6/8/20: Multiple options provided to facility to prevent future discharges. 6/12/20: Pig Absorbent mats provided to facility for use. 2/8/21: Liquids are still being tossed into compactor and leaking towards SMFs. 3/13/21: Liquids are still being tossed into compactor and leaking towards SMFs. Facility personnel is provided training and additional guidance. 3/25/21: Facility is issued another corrective action and additional information/guidance on proper liquids disposal. 6/23/21: Windshield inspections showed Liquid from trash waste (suspected to be residual milk waste) was leaking from the trash compactor. 6/24/21: Compactor was inspected and is set to be replaced by Solid Waste Contractor. The Solid Waste COR is investigating when the compactor will be replaced and getting specifications for the new compactor so that Commissary personnel will know what types of wastes can be placed in the compactor. 7/1/21: Contractor visited site and found that drain in compactor had no plug, contractor made a makeshift drain plug. 7/13/21: A possible second leak was observed as fluid was noted near the back of the compactor. 5/27/22: Compactor leaking issue noted during windshield inspection. 8/24/22: Compactor leaking issue noted during windshield inspection. 10/28/22: Compactor leaking issue noted during windshield inspection. 2/16/23: Compactor leaking issue noted during windshield inspection. 4/12/23: Notifications sent to solid waste COR (Vijay Ivatury) about leaking dumpster, contractor notified of issue. 4/17/23: Notification received that compactor will be removed from the site for repairs this week, and replaced with four 8-cubic-yard dumpsters in the interim while repairs are being made. 5/11/23: During a routine windshield inspection for route 6, area behind compactor was inspected for waste leaking into bioretention unit. There was a small pool of rotten milk, but there was no obvious flow of liquid from compactor to bioretention unit. 5/24/23: Follow up inspection was performed and liquid was found leaking from the compactor down to the bioretention pond receiving channel. Area smelled heavily of rotten food.	Valid Report/Illicit Discharge/Corrective Action Required	Open	
21-15	12/28/2020	Direct Notification	3011	Landslide Old railroad tracks behind Bldg 1457. DPW Staff received a notification from a hunter of a landslide and water flowing along the old rail road tracks behind Bldg 1457. During DPW staff investigation a broken stormwater pipe/conveyance (Outfall 3011) that goes under the road was found to be broken and water is seeping through making the road unstable and causing the landslide.	Investigation Report with recommendations submitted to DPW Leadership on 30 Dec 2020. This incident was also included in the Maintenance schedule to be repaired when funding becomes available. 4/26/22 – Follow up email sent to ISW Program Manager about IJO. 5/4/22 – IJO FE-22058-2J Work Order submitted to DPW-BOID for review. 5/20/22: IJO Signed and assigned project manager of: Haider Alrubaye (703-806-3812). 10/10/22: Follow up email sent to Haider Alrubaye requesting status, response received 10/12/22 stating that project is pending cost estimate and SOW. 1/3/23: Follow up email sent to Haider Alrubaye requesting status. Response received 1/4/22 stating still waiting on cost estimate and SOW. 4/19/23: Follow up inspection of the site performed by DPW Environmental contractor Daniel Schlobach around 1200. Weather was clear and temperature was around 65 degrees F. No signs of any work has been performed at the site. Flow was observed to be coming from the broken outfall 3011. Conditions have remained the same with additional collapse noted.	Valid Report/Illicit Discharge/Corrective Action Required	Open	
21-31	3/2/2021	DPW Inspector	3022	During quarterly inspections 1. improperly stored nitrogen fertilizer was observed 2. Improperly installed silt fence 3. High amount of trash throughout building grounds 4. Improperly stored hazardous materials that could become in contact with stormwater	AAFES personnel addressed the corrective action form items 2-4 26 March 2021: another set of improperly stored Nitrogen fertilizer was found on site. Another corrective action form was issued. During follow up inspections it was confirmed that the nitrogen fertilizer concern has been addressed, however the mismanagement of trash and materials continues. 11 May 2021: Site visit showed that issues with trash and material management persist at the facility. Noted issues included leftover stakes from silt fences, trash throughout building grounds, and improperly stored materials. 11 May 2023: During a routine windshield inspection of Route 6, trash was still found around loading docks and within two bioretention ponds. An uncovered dumpster and some loose trash was in the process of being removed upon inspection. Trash needs to be properly contained and disposed of before entering any SW BMPs. 28 August 2023: During a routine windshield inspection, DPW-ENV Contractor Daniel Schlobach observed an open dumpster that was leaking trash onto the pavement and trash scattered on top of the storm grating. Bags of mulch were found opened in the parking lot however no fertilizer was found improperly stored. See photos dated 8/28/23 below. 9/6/23: Routine windshield inspection of the area showed the same issues as previously mentioned. See photos dated 9/6/23 below. 11/28/23: Routine windshield inspection of the area showed the same issues as previously mentioned. See photos dated 11/28/23 below.	Valid Report/Illicit Discharge/Corrective Action Required	Open	
21-45	5/14/2021	Direct Notification	N/A	A resident reported via email to the MS4 Program Manager that there is a high amount of trash in Colyer Village behind 5823 Peterson Loop and all the way east down the ravine. It is clear that a couple of people have pushed car engines down that hill rather than dispose of them properly.	Recommendation is to update the education and outreach plan to include regular articles in the Resident newsletter to increase awareness in the housing districts and to coordinate more cleanup events with the housing community. As of June 30, 2021 no efforts have been made. 5/27/22: Follow up inspection shows that trash and car engines are still located in the woods and woods line within the area. 4/4/23: Follow up inspection shows that trash and car engine are still located in the woods and woods line within the area. Additional pictures have been attached to show the extent of the illegal dumping occurring in the woods behind 5823 Peterson Loop. 5/16/23: Received signed 4238 form from Sybille for the trash pickup in woods behind 5823 Peterson Loop. 7/12/23: Received email from Eric Caminiti regarding trash pickup behind Colyer Village. Since the trash is found outside the lease limits of Colyer Village, Housing is not responsible for this work and the funding has been provided by DPW. 7/27/23: A follow-up inspection was performed to locate the car engine. Upon arrival, the car engine was not located and can be assumed it was picked up and disposed of. See attached photo dated 7/27/23 of wooded area behind Colyer Village were car engine was located in previous inspections. 8/4/23: DPW Environmental Contractor Daniel Schlobach went back to wooded area to make sure the car engine was gone. It was found several feet downhill from the dumping site in a ditch off the access road, making it hard to spot. The trash observed during the 4/4/23 inspection remains in the woods. The lat/long coordinates for each item are included in the photo descriptions for this follow-up inspection. Photos 1-5 dated 8/4/23. 5/2/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and found the car engine still present in the woods behind Colyer Village.	Valid Report/Illicit Discharge/Corrective Action Required	Open	

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
21-46	5/24/2021	Direct Notification	2986	DPW-Personnel was notified of a leaking aboveground storage tank at Building 1412. On site, DPW personnel observed a compromised 500 gallon tank containing diesel fuel. The FBFD had utilized a golf tee to plug a small hole at the bottom of the tank to stop the leakage. Granular absorbent material and spill pads were utilized to contain the spill, but there was evidence that the spill had reached the surrounding soils.	There was an adjacent stormwater drop inlet approximately 60 feet to the northeast of the compromised tank/spill area. The stormwater inlet was checked periodically for the duration of the spill event for any observable sheens. No sheens were observed, therefore, it is assumed that no fuel reached any water bodies. Spill was contained and currently remediation efforts are still ongoing. 12/8/21: Contaminated soil has been dug up for proper disposal. Contractor set to drain pit week before Christmas 2021 and take samples, samples will be analyzed and results sent to VADEQ, VADEQ will provide direction if backfill may occur to close out. 1/17/22: Follow up email sent to Sam Johnson 1/18/22: Contractor unable to complete work before holidays, scheduled to start 1/18/22, should take 2-ish days to complete work. 3/17/22: Follow up email sent to Sam Johnson 3/21/22: Sam Johnson responded verifying site has been drained, sampled, sample results sent to VADEQ 2/15/22, VADEQ responded 2/15/22, response sent to VADEQ 3/14/22, DA4283 (FE-22032-2J) initiated to begin restoring the site and approved on 3/16/22. 4/28/22: VADEQ notice of closure of case received from Sam Johnson. O&M currently working on restoration project hopefully to begin within the next couple of weeks. 8/10/22: DIG Permit 22-188 Submitted to fill leftover hole to complete project. A follow up inspection occurred this day to document conditions prior to filling the hole, see photos from this day. 10/10/22: Follow up inspection shows that work has been completed on filling the hole, and the area has been appropriately seeded and mulched to stabilize with adequate grass growth present. This issue may now be closed out.	Valid Report, Illicit Discharge, Corrective Action Required	Closed	
21-55	6/23/2021	Windshield Inspection	BMP 2535	PX trash compactor had trash packed under that had come out through chute.	Pursue obtaining additional trash dumpsters and/or additional compactor pick-ups through AAFES contracting. Instruct personnel to not overfill compactor. June 30 2021: Request sent to Solid Waste COR in O&M 1/17/22: Follow up email sent to Sybille requesting email, as well as Vijay about what is occurring. 1/21/22: Follow up inspection shows area is still overflowing with lots of trash and has not been cleaned up. 5/11/2023: Follow up inspection during windshield route 6 shows area still overflowing with lots of trash and has not been cleaned up. 5/24/23: Follow up inspection noted that excess trash is still accumulating on top of the storm drain and trash bags found next to the dumpster and not inside. August 28 2023: Follow-up inspection shows trash still scattered around and underneath compactor, and on top of storm drain. Time of inspection was 1038 and weather was overcast and approximately 76 degrees F. See photos dated 8/28/23 below. 9/6/23: Routine windshield inspection of the area shows the same issues as previously mentioned. See photos dated 9/6/23 below. 11/28/23: Routine windshield inspection of the area shows the same issues as previously mentioned. See photos dated 11/28/23 below. 3/7/24: Routine windshield inspection of the area shows the same issues as previously mentioned. See photos dated 3/7/24 below.	Valid Report/ Potential Illicit Discharge/Corrective Action Required	Open	
22-28	2/14/2022	Windshield Inspection, DPW Inspector	N/A	Various instances of trash being dumped at dumpsters around Fort Belvoir from illegal dumping activities. There is no avenue for residents to dispose of large trash items, and so an increase of illegal dumping has been seen across the installation. Rather than open up an individual report each time this occurs, this Illicit Discharge Tracking # shall be utilized to compile any illegal dumping at dumpster issues seen.	All excess trash outside dumpsters and around the installation needs to be removed and disposed of properly. 4/27/23: DPW Environmental Contractor Daniel Schlobach followed up on all instances of illegal dumping documented in this report. Several sites still have trash remaining and several have had the trash removed (see updated report for reference). 5/2/24: Follow-up investigation revealed bulk furniture and trash still present at the same sites idenitfied during the April 2023 investigation.	Invalid Report/No Illicit Discharge/Corrective Actions Required	Open	
22-33	3/31/2022	DPW Inspector	N/A	A hydraulic fluid spill occurred at the activated barrier just outside of Farrar Gate to Davison Army Airfield. The spilled material is Envirologic 132 Hydraulic Fluid (see attached SDS). The rupture occurred at the control box for the activated barrier and spilled hydraulic fluid into the grassy area adjacent as well as filled up the observation well within the activated barrier.	Area will need to have all affected soils removed and disposed of properly. Hydraulic Control Station will need to be repaired. Additional hydraulic fluid in activated barrier will need to be removed and disposed of properly. All disturbed areas will need to be seeded and mulched to re-stabilize. 4/1/22: An emergency DIG Permit 22-111 has been submitted to address this issue. The area has absorbent booms installed downhill in the flow path and also the area has been covered with tarps to prevent contact with rainwater until the DIG Permit is approved. 5/3/22: Spill Report from Mr. Doo Lee (DPW Haz Waste Program Manager) received. Spill not yet cleaned up. 8/24/22: Follow up inspection confirms that this action has not been addressed, see photos for documentation. 10/10/22: Follow up email sent to Sybille Vega and Doo Lee requesting status of cleanup and for initiation of process if not started. 10/11/22: Response from Sybille Vega stating it has not been addressed. 10/18/22: Follow up email sent to Ryan Maisano and Mr. Doo Lee to ask that situation is brought to Mike Wolfe for funding and prioritization. 10/19/22: Ryan Maisano asked Mr. Mike Wolfe if project can be funded, no response received. 1/3/23: Follow up email sent to Ryan Maisano, Mike Wolfe, Sybille Vega, Lee Doo, and Ashley McMahon on project status. Ashley McMahon responded to say that she saw seed and straw being placed on area. 1/12/23: Follow up inspection occurred, did not see any seed or straw in area and all tarps and coverings have been removed with black oil-like stain on soil still very visible. Report updated and sent to Ashley McMahon. 1/13/23: Email from Ryan Maisano requesting that the area is at least covered with a tarp until another work order can occur. 4/19/23: Follow up inspection of the impacted area showed the contaminated soil has not been removed yet. 4/20/23: Follow up email from Ashley McMahon to COR Vijay Ivatury asking for update. DIG Permit has not been funded yet, falls under service requirement funding as compared to repair/construction funding so issues with acquiring funding still occurring. 2/26/24: Received update from Zach Witman stating issue is still waiting for funding from O&M before impacted soil can be removed.	Valid Report/Potential Illicit Discharge/Corrective Actions Required	Open	
22-41	6/14/2022	ORI	984	Suspected illicit connection leading ultimately to Outfall 984. An unknown 4" pipe is seen coming into Area Inlet 988, not shown in Stormwater map book, suspected to come from Building 247 roof drains. This outfall was screened as part of the 2020-2021 Outfall Reconnaissance Inventory and this incident was discovered during a dry weather screening.	2/15/22: During the first ORI inspection conducted on 2/15/2022 @1337, A sample was collected from the flow and Hach Water Testing was used to test for pH, Ammonia, Free/Total Chlorine, Nitrates, Nitrites, Fluoride, and Phosphates. Tests showed elevated levels of Ammonia, Phosphate, and Fluoride in the sample (pH 7.34, Ammonia 0.65 mg/L, Free Chlorine .00 mg/L, Total Chlorine .15 mg/L, Nitrate 0.3 mg/L, Nitrite 0.006 mg/L, Fluoride 0.48 mg/L, Phosphate .46 mg/L), but none of the tests showed an exceedance of the illicit discharge threshold. 6/14/22: A trunk investigation was conducted on 6/14/22 @1340, temperature was 79 degrees F and there was 0.49" of rainfall within the past 48 hours. The entire storm drain system leading to Outfall 984 investigated which included structures 984 through 993. Structure 984 was found to be flowing. No noticeable roof drains were seen on the exterior of Building 247 and the roof is flat, so it is believed that if roof drains exist they are inlets on top of the roof that go through the interior of Building 247. Water was seen flowing into area inlet 993 during the inspection from an unknown 4" pipe, see Photo 3. During the past 2020-2021 ORI an inspection of area inlet 988 by a former MS4 Program Manager, Yari Chiro, indicated that an unknown pipe was located flowing into area inlet 988. During this initial field investigation, it was field verified there was no additional pipe seen within this area inlet 988. It is believed that this was a mistake, and Yari Chiro meant area inlet 993. It should also be noted that this unknown pipe is not pointing directly at Building 247, but rather across the street towards Building 269. 4/19/23: Follow up inspection was performed by DPW Environmental contractor Daniel Schlobach at around 1130. Weather was clear and temperature was around 61 degrees F. Outfall 984 was found to be flowing at time of inspection. A trunk investigation was performed again, looking at all MS4 structures in the immediate area that feed into outfall 984. Inlets 985, 986, 988, 989, 991, and 993 were inspected to look for any signs of flow. Inlet 993 contained some standing water at base of inlet, however the unknown 4" pipe identified on the 6/14/22 inspection was not flowing. See attached photos for further reference.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
23-01	7/11/2022	Windshield Inspection	N/A	During a Windshield Inspection, work was seen being performed at Building 206 (5830 19th Street). It was determined that a DIG Permit was not on file for this project. Additionally, silt fence was seen to be inadequate as well as down in several areas, sanitary facilities were seen located too close to stormwater inlets, several concrete spills were seen on site with no concrete washout areas, no inlet protection was seen on any adjacent stormwater inlets, soil stockpiles were seen that were unprotected, and dumpsters were seen that were uncovered, please see all photos. POC's for this project determined on site were James "Drew" Driggers as the Senior Project Manager, 202-631-1346, james.driggers@chenega.com, and Brad Mackenzie as the Construction Manager, 571-358-7843, bradford.mackenzie@chenega.com.	First, a DIG Permit must be submitted for this project before any other land disturbing work may continue. All sanitary facilities must be re-located to be at least 25' away from any stormwater feature. All concrete spills must be scooped up and disposed of properly and a concrete washout must be used for all concrete pouring activities. Silt fence must be repaired where down and be extended around the entire project site to prevent erosion from any disturbed area around the building. Inlet protection must be placed on all inlets that are adjacent and receive drainage from the building and construction area. Soil stockpiles must be either covered or temporarily seeded and mulched to stabilize. Dumpsters must be covered on the project site to prevent contact with rainwater. See attached specifications and photographs for additional details. 7/26/22: DIG Permit 22-166 submitted and reviewed at DPW. 8/9/22: Notification email received from Bradford Mackenzie with some photographs showing that all deficiencies have been addressed. Follow up inspection scheduled for 8/10/2022. 8/10/22: Follow up inspection performed showing that all issues have been addressed except for the silt fence not being installed properly. Silt fence is still flapping in the wind and is not entrenched, and needs to be entrenched appropriately around the entire project site. Report re-written and sent to contractor, Silt Fence specifications re-sent to contractor. 10/10/22: Follow up phone conversation with Drew Driggers regarding project status, site inspection scheduled for Friday 10/14/22 as no personnel on site today. 10/13/22: Complaint received from Camila Dias on ESC issues at project site. 10/14/22: Follow up inspection shows issues at site still present. Full ESC Inspection and report occurred with Mr. James "Drew" Driggers. Site added to standard ESC Inspection schedule until under control. 10/28/22: Follow up inspection shows all site issues have been addressed, and no remaining issues were present. All silt fence replaced with sediment filter bags or compost filter socks, please see all photos. This issue is now recommended for closeout.	Invalid Report/No Illicit Discharge/Corrective Actions Required	Closed	
23-02	7/15/2022	DPW Inspector	N/A	A previously unknown Septic Tank at the golf course maintenance building 2990 was found to be overflowing. The tank is estimated to be at 6,000 gallons in size and there is an alarm panel in the Manager Office with the high level warning light on and the alarm silenced. The tank is dripping out of the manhole slowly.	Not captured in Bacteria TMDL and we specifically stated that we have no septic tanks to worry about, plan will need to be updated or it will need to be removed. Why is facility not connected to sanitary sewer. Talk to Ryan Maisano and get more of a story from him. 8/15/2022: Follow up email sent to Ryan Maisano to obtain additional information. Figured out tank has been cleaned out and O&M has been advised to abandon tank and connect to sanitary system. PWO DC-22047-2J submitted and approved on 7/18/22 for cleaning out the septic system. 10/10/2022: Follow up email sent to Ryan Maisano, Calli Kaufhold, and Jason Chan requesting status update and if Bacteria TMDL has been updated. 10/11/2022: Email chain shows that tank (holding tank) is not to be abandoned, but to be replaced with a larger holding tank to be maintained by AW and pumped on a regular schedule. Email shows that tank was "forgotten about" for approximately two (2) years, could have been discharging this entire time, no one has a solid answer. Tank is approximately 6,000 gallons in size and fills up in about three (3) months time. See emails for additional information. 10/26/2022: Follow up email questions on tank sent to Jason Chan. Calculated worst case scenario at 48,000 gallons of raw sewage discharge. Recommended that VADEQ Pollution Report is filed as well as to contact the Virginia Department of Health due to nature of the discharge. 1/3/2023: Follow up email sent to request status of where issue is with inspection, permitting, replacement, work orders, any new overflows, etc… Response received from Ashley McMahon stating O&M has not provided a response and to bring this issue up during staff call. 2/13/2023: Per a conference call with Ashley McMahon (Acting MS4 Program Manager) a meeting occurred on February 1st with the assigned Project Manager (Vijay Ivatury), the Golf Course staff, and American Water (AW). A PWO was put in to pump the septic tank as well as perform an investigation. The current plan is that if the tank is in good condition, the tank is to remain and it will be determined what permit may be necessary, if it is grandfathered, who will submit for the permit, and what funds would be necessary. If the tank is not in good condition, it will be abandoned in place and temporarily replaced with port-a-johns, and a new sanitary line will ultimately be connected to tie into the mains adjacent to Walker Gate. AW is providing an estimate for this work currently. Additional investigation will be completed to determine if the soil is contaminated, and if lime needs to be put down as well as if the Department of Health needs to be notified. 5/15/23: Follow up inspection showed site conditions appear to be the same as the initial inspection, which was done in July of 2022.	Valid Report/Potential Illicit Discharge/Corrective Actions Required	Open	
23-08	8/30/2022	DPW Inspector	5012	Located at the Remote Inspection Facility (RIF) at the ADF-E Inspection gate, leaking red radiator fluid in an approximate 140' long stretch of road leading up to and going underneath the RIF overhang.	Safety and Security was notified immediately of spill. Mr. David Greenspan was already within the secure area for other inspections with Safety, so was able to respond to the spill immediately. Absorbent litter was placed immediately in area to prevent any flow off of the concrete. Spill did touch the trench drain at the RIF, but it was extremely minimal, so there is the potential for an illicit discharge. The truck was researched and found to have a total of 11 gallons of radiator fluid within it, but less than half of this was spilled, estimated at just below 5 gallons total. The majority of the spill was in a covered overhang area. Pictures are set to be sent of the cleanup by ADF-E Safety once they clear Security (no photos were cleared). 10/10/22: Follow up email sent to John Barnett for ADF-E Report and close-out verification. 10/25/22: Conference Call with ADF-E Safety (John Barnett), ADF-E Spill Incident Report Form received, spill verified as cleaned up, no photos due to secure area, issue may now be closed out.	Valid Report/No Illicit Discharge/No Corrective Actions Required	Closed	
23-11	10/21/2022	DPW Inspector	4217	An unknown CMP pipe was seen within a Wet Pond (BMP #4064) during a meeting on 10/4/22 discussing maintenance requirements with FBRC. During the inspection for this report, it was determined that the pipe is a leftover temporary outlet from the original construction of the Wet Pond. The unknown pipe appears to be CMP on the side of the pond, connected to RCP at the outlet location. The riser structure was assessed, and it is DPW-Environmental's opinion that the pond/riser structure is correctly designed for a wet pond with an adequate outfall and inflow, and that the leftover CMP/RCP combo pipe does not meet the original design intent of this location.	It is recommended that the leftover pipe is capped on each end and abandoned in place. Alternatively, the pipe may also be removed. The erosion that is occurring on each side will need to be filled in and graded to match existing grade, as well as seeded and mulched to stabilize. Report sent to FBRC BMP maintenance contractors Ken Eyre (keyre@blueheronlg.com) and Stephen Aitcheson (saitcheson@blueheronlg.com) as well as FBRC Eric Caminiti (ecaminiti@tmo.com). 11/17/22 – Site meeting with Blue Heron, FBRC, Ryan Maisano (DPW), Calli Kaufhold (DPW), and David Greenspan (DPW). To go over historical data and get eyes on the issue. 11/18/22 – Proposed maintenance plan for BMP provided by housing for area. 11/22/22 – Notes provided to Calli Kaufhold on BMP issue, everyone is in agreement to move forward. 12/5/22 – Concurrence received from FBRC to install adjustable control orifice to monitor water levels during first two quarters of 2023 when maintenance performed on BMP 4064, see email. 4/5/2023: The pipe within the Wet Pond was capped using corrugated metal and wooden stakes. The area immediately around the pipe needs to be seeded and mulched for stabilization. 10/5/23: Corresponded with TMO and received confirmation that the pipe is unneeded, and the work to plug the pipe is scheduled to be completed in late 2023. 12/7/23: Removed the temporary metal plate/plug and abandoned/grouted unneeded pipe. 12/8/23: Backfilled/repaired eroded areas and stabilized disturbed areas with seed and EC matting. 12/12/23: Received confirmation that the unneeded pipe was successfully plugged and all disturbed areas at final grade have been stabilized. Received the completion report and maintenance log documenting the work.	Invalid Report/No Illicit Discharge/Corrective Actions Required	Closed	12/20/2023

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
23-13	11/2/2022	DPW Inspector	N/A	The secondary containment for the brine operations is estimated to hold around 2,000 gallons, while the current brine tanks equate to 4,000 gallons (1x1,000 gallon tank & 1x3,000 gallon tank). The secondary containment is undersized for this operation, and the material used (asphalt for the berm) is not completely impervious. There is additionally evidence of stormwater and sediment in the containment area.	A properly sized secondary containment must be installed, sized at 110% capacity (4,400 gallons) if stormwater is removed within 24 hours of a storm, or 125% (5,000 gallons) capacity if not. Ensure that the new secondary containment is fully impervious to contain any leaks or spills, and is kept free of stormwater, sediment, and debris. It is recommended that a covered overhang is provided to prevent contact and contamination with rainwater. Note: Directions in photos provided below were noted incorrectly by original inspector (i.e. areas noted as north are on the south side of containment and visa versa). 11 November 2022 - PWO# FE-23021-3J was submitted was by DPW - Environmental for required work. 18 January 2023 - Work had funding approved by DPW - BOID office. 28 February 2023 - Scope of work was received by DPW - Environmental Review under project Bldg. 1114 Brine Storage (ENV23-138) with comment period closing on March 14, 2023. 21 March 2023 - Aerostar personnel, Camila Goncalves Dias, noted that referenced sketch in the SOW is missing. Requested from O&M and added to CA and NEPA files. 22 March 2023 - Follow-up inspection occurred and confirmed no work have been initiated. The facility is in the process of de-mobilizing winter maintenance supplies and equipment. It is recommended that the Brine Tanks be drained as a part of the demobilization and that containment structures be prepared for implementation prior to the next winter season (October 2023) 4 April 2023 - Facility requested guidance from DPW on draining brine from tanks and cleaning. 10 April 2023 - VADEQ noted during site visit that they agreed with the need for additional containment capacity and waiting until next winter season for implementation. 20 April 2023 - Email from Camila stating that the Brine tank containment has been going around for review, but Aleut is still awaiting feedback on brine disposal. 24 October 2023 - Received email from Bethany Baldwin confirming the work was completed in August of 2023 and that Aleut was able to store the brine in another tank during repairs. 26 October 2023 - Performed a follow-up inspection of the site and confirmed completion of work. See photos below for more detail. No further action is required.	Invalid Report/No Illicit Discharge/Corrective Actions Required	Closed	10/26/2023
23-21	12/6/2022	Windshield Inspection	N/A	Open dumpster at golf course with trash spread over the surrounding area. The dumpster lid is broken and needs to be replaced/repaired.	Properly dispose of the trash around the dumpster and ensure that the dumpster lid is replaced/repaired to prevent stormwater contamination. Report distributed to Tim Coolican (timothy.j.coolican.naf@army.mil), Fritz Diekmann fritz.diekmann2.naf@army.mil), and Benjamin Ellis (benjamin.r.ellis6.naf@army.mil). 1/3/23: Follow up email sent to all POC's to determine status, no response received to original email. 1/11/23: Follow up email sent to above and additional contacts as no response has been received. Ashley McMahon tagged onto email to forward to James Burnett to notify of issue and elicit a response. 1/12/23: Response received from James Ladebush stating that the COR from DPW has been notified about replacing the dumpster and that it has been put on a waiting list, and that trash will be picked up in the interim time. An additional email was distributed to Vijay Ivatury (DPW POC) to ask about a replacement dumpster and if an adequate container is required in the trash contract, as the current dumpster is not adequate. 1/13/23 Response received from Vijay Ivatury stating dumpsters are in short supply, and as soon as one is available it will be replaced. 5/5/23: Vijay confirmed an additional dumpster was added to the parking lot as requested on 5/1. 5/15/23: Follow up inpsection showed the second dumpster was placed in the parking lot, however one dumpster is still missing one of the lids and needs to be repaired. Trash is overflowing from the broken dumpster. 5/24/23: Follow up inspection noted that excess trash has been cleaned up, however the dumpster lid is still missing from one of the dumpsters and needs to be replaced. 8/4/23: Follow up inspection of the site was performed and one of the dumpsters is still missing its lid (lid is on the ground next to the dumpster and can easily be fixed). Dumpster is full of items that could potentially lead to an illicit discharge when exposed to rainwater. Photos dated 8/4/2023 show the current state of the damaged dumpster. 8/10/2023: Solid Waste PM noted that once a new dumpster becomes available it will be used to replace the damaged one. 9/8/2023: During a routine windshield inspection, DPW-ENV Contractor Daniel Schlobach noted that the dumpster in the parking lot is still damaged and needs to be replaced. 12/5/2023: During a routine windshield inspection, DPW-ENV Contractor Daniel Schlobach noted that the dumpster in the parking lot is still damaged and needs to be replaced. 3/14/2024:During a routine windshield inspection, DPW-ENV Contractor Daniel Schlobach noted that the dumpster in the parking lot is still damaged and needs to be replaced. 6/13/2024:During a routine windshield inspection, DPW-ENV Contractor Daniel Schlobach noted that the dumpster in the parking	Valid Report/Potential Illicit Discharge/Corrective Actions Required	Open	
23-23	1/5/2023	DPW Inspector	N/A	Indications of sewage fungus was observed in two electrical manholes. These manholes undergo scheduled pumping regularly which should be avoided until a source of the fungus is found and remediated.	Investigate the other 2 electrical manholes located up-hill to determine if sludge build-up is observed uphill to try to narrow the area of potential infiltration. Continue up the trunk until no sludge build-up is noted. Investigate plans for nearby sanitary sewer to identify possible crossings with the electrical lines observed. Contact Fairfax County for further investigation if a line with potential damage is found. Avoid pumping out of manholes (currently scheduled quarterly) until source is found. 5/15/23: Follow up email was sent to John B regarding the status of this issue.	Valid Report/Potential Illicit Discharge/Corrective Actions Required	Open	
23-34	4/10/2023	Direct Notification	3439	Sewage smell was observed to be emanating from several storm inlets near Building 2110, specifically the McCree Barracks. It is believed the sewage system is tied in with the storm system causing sewage to flow through and giving off an obvious smell. Outfalls and inlets near the amphitheater were inspected and a strong methane smell was present.	At least three buildings are affected (Bldgs 2102, 2103 and 2109). The first-floor common areas of all three buildings have been verified to have the sanitary lines tied into the storm drain; some buildings have one common area, some have two. It is believed that none of the building suites are affected. The buildings are residential barracks and are currently occupied. A renovation project for the McCree Barracks has been underway, and work was completed on the common areas for these buildings approximately two years ago, so the discharge has been present for at least this long. Grunley Construction is the company responsible for the work, with project manager Mike Stigliano (mikestigliano@grunley.com). The work was overseen by USACE, with a COR of Mr. Jerry Williams (jerry.d.williams@usace.army.mil). Please see more detailed attached write-up for information about this event and corrective actions taken.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	9/6/2023
23-38	5/15/2023	DPW Inspector	N/A	Large uncovered dumpster containing bulk furniture, and bulk furniture in the parking lot of the CAP Bldg 3123 was found during a follow up inspection of the area. This has been a recurring issue.	5/15/23: The dumpster and bulk furniture will need to be covered to minimize exposure to rain and thus preventing an illicit discharge. Report distributed to Daniel Fulford (202-685-9719, daniel.b.fulford.civ@army.mil), Willie Faconer (202-685-8818, willie.d.faconer3.nfg@army.mil), CW3 Melinda Herder (703-806-7703, melinda.l.herder.mil@army.mil), and CW4 Rendell Long (361-961-6489, rendell.l.long.mil@army.mil). 5/24/23: Follow up inspection noted that dumpster containing bulk furniture is still uncovered. Bulk furniture in the parking lot was appriopriately removed. 8/4/23: Follow up inspection noted that the dumpster is free of any items and incident can be closed out (photo 1 dated 8/4/2023). Reminder to cover the dumpster effectively when not in use, this is to prevent an illicit discharge from occurring when the contents are exposed to rainwater.	Invalid Report/No Illicit Discharge/Corrective Actions Required	Closed	8/7/2023
23-40	5/17/2023	DPW Inspector	N/A	Backflow preventers were found leaking directly into the bay during an inspection of the Marina. The most northern preventer was leaking approximately 80 gallons/day, but this one has been subsequently shut off. The southern preventer was leaking around 10 gallons/day	Note: The installation of a new backflow preventer at the Marina was confused with the existing structures that were reported to be leaking, which resulted in a huge delay between the closeout of the VADEQ pollution report in June of 2023 and re-inspection of the Marina to confirm the backflow preventers were repaired in October of 2023. See email attachments for more details. 5/17/23: Inspection of the Marina found both backflow preventers were leaking right into Dogue Creek - the northern most preventer was shut off at around 1300. See photos below for documentation of the leak. 5/18/23: Issue was reported to VADEQ under report #309326, which is attached to this report for reference. A follow-up inspection shows significant work has been done, and only the southern-most preventer is leaking. 5/23/23: Follow up inspection performed by MS4 Program Manager Ashley McMahon shows that repairs have been performed to stop the leak from the southern-most preventer. Waiting on confirmation from Aleut that a certified inspector is available. 6/22/23: VADEQ Pollution Report #309326 was closed out. 10/19/23: VADEQ submitted a SSO non-permitted discharge warning letter citing this incident. 10/26/23: Follow-up inspection of the Marina was performed and both backflow preventers were found to be leaking again with water discharging directly into Dogue Creek. Notified the MS4 PM who was able to get an emergency work order submitted.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
23-42	5/24/2023	DPW Inspector	N/A	During a follow up inspection of Colyer Village, bulk furniture was found dumped on the sidewalk behind several houses on Peterson Loop and adjacent to Troop Command.	6/6/23: A Work Order/4283 was signed submitted to address the furniture disposal in Colyer Village (document is attached to this report). 6/20/23: The Work Order/4283 was canceled since Housing will be funding the cleanup efforts (see attached emails). 7/27/23: During a follow-up inspection of the area, it was noted that the bulk items had been removed (see attached photos).	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	7/27/2023
23-43	5/23/2022	Direct Notification	N/A	Samuel Johnson reported between 5 and 45 gallons of JP-8 leaked from a generator. The leak made it into the grass, but did not extend into any water or storm drains.	5/23/22: Samuel Johnson reported a fuel spill at the 249th Motor Pool and generated a spill report documenting the spill (spill report is attached for reference). A 4283/Work Order was submitted to remove the contaminated soil from the spill site. Aleut responded to the spill and covered and sandbagged the area. 6/12/22: Several photos to document the remediation progress were taken. 7/14/22: Soil samples were received by the lab for hydrocarbons analysis. 6/5/23: DPW Environmental Division Petroleum & Spill Response Program Manager Zach Witman inquired about the issue and received some background information on the spill (email chain attached to report). 6/12/23: DPW Environmental Division Petroleum & Spill Response Program Manager Zach Witman obtained soil test results and had Aleut containerize the soil and had a turn in request form filled out so containerized soil could be delivered to the Hazardous Waste facility. DPW Environmental Contractor Daniel Schlobach along with Zach Witman responded to the spill scene to obtain more photos. 6/20/23: DPW Environmental Contractor Daniel Schlobach obtained the soil test results displaying the presence of diesel range organics (DRO) and oil range organics (ORO) in the soil samples sent for analysis (lab report and results are attached to report). 10/10/23: Received confirmation from Zach Witman that all issues have been addressed and no further action is required. Will obtain photo documentation prior to closing ouot this report. 10/13/23: Follow-up inspection of the site confirmed the work has been completed. Photo 7 documents all materials have been removed and grass growth is observed at the impacted site. No further action is required.	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	10/25/2023
23-44	6/23/2023	DPW Inspector	N/A	DPW Environmental Contractor Daniel Schlobach noticed large amounts of illegally dumped furniture found in and around the dumpsters by the thrift store. It was raining at time of observation.	7/5/23: DPW Environmental Contractor Daniel Schlobach noticed a closed container of camp fuel dumped on the ground next to one of the dumpsters and documented the issue. 7/10/23: DPW Environmental Contractor Daniel Schlobach and AECOM Intern Luke DeVore performed a follow-up inspection and noticed more bulk furniture dumped on the ground next to the three dumpsters. Met with Jennifer Calhoun at the thrift shop and she mentioned that a third party hauler comes and picks up the bulk furniture. Working on a temporary solution to ensure any dumped furniture is properly covered and not exposed to rain water. She informed us that no liquids are allowed to be dropped off at the thrift shop, yet finds containers of liquid frequently, however the hauler takes liquids in addition to the bulk furniture. WB Waste was on-site clearing the brown dumpsters during this follow-up inspection. 8/15/23: During a routine windshield inspection, it was noted that the bulk furniture dumped on the grass next to the dumpsters has been removed.	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	8/16/2023
23-45	6/23/2023	DPW Inspector	N/A	DPW Environmental Contractor Daniel Schlobach noticed several oil slicks on the asphalt near the dumpsters by the thrift store. Due to the rain, the oil was flowing from the asphalt to the dumpsters and into a grassy area just next to the one of the dumpsters. The oil did not make it into the storm system.	6/26/23: DPW Environmental Contractor notified DPW Environmental Division Petroleum & Spill Response Program Manager Zach Witman of the oil spill. 7/10/23: DPW Environmental Contractor Daniel Schlobach met with DPW Environmental Division Petroleum & Spill Response Program Manager Zach Witman to determine the size of the impacted area and how much should be removed. 10/10/23: Received confirmation from Zach Witman that the issue can be closed out. Will obtain photo documentation prior to closing out this report.	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	10/13/2023
23-46	5/17/2023	DPW Inspector	1715	Upon inspecting outfall 1715 on 5/17/2023 to confirm the illicit connection from Bldg 357 was fixed, the outfall was found to have a heavy flow coming from pipe A and a trickle flow coming from pipe B.	5/17/23: Inspection of the outfall determined there is still an illicit connection. An Outfall Reconnaissance Inventory Report was generated for this outfall. 6/21/23: A wet weather inspection of a section of the trunk that discharges into a small stream (consists of the large parking lot just south of Burbeck Road), which eventually feeds into another trunk that discharges ultimately at outfall 1715. See attached word document summarizing this investigation. 6/30/23: A trunk investigation consisting of the storm systems around buildings 305, 309, and 357 was conducted to determine source of illicit discharge. Flow was determined to be coming from in or around building 309 starting with area inlet 1759; building plans will need to be reviewed to determine a source of the illicit discharge. 8/28/23: Reviewed building plans for Bldg 309 and could not find an obvious illicit connection to storm. Will need to take a water sample to rule out sanitary connection. 10/2/23: Followed-up at the area inlet and water was still present. Sampling effort will be coordinated to take a closer look at the unknown discharge. 10/10/23: Sampling event scheduled to occur in the afternoon of 10/16/23. Will sample several inlets along the truck to test for possible illicit sanitary connection. 10/16/23: Only one sample from outlet 1729 was taken due to inability to open several manhole covers. Water was not seen flowing from area inlet 1759 by Bldg 309. Water quality tests were started to determine if water discharging from outlet 1729 is coming from an illicit connection. 10/17/23: Water quality tests were completed. See attached summary file for the results of the tests. No parameters exceeded the illicit discharge thresholds so flow is not the result of an illicit connection. 10/18/23: Since source of the flow could not be determined and no water was found coming from Bldg 309, it is assumed that the flow is groundwater influenced due to the presence of an ephemeral stream running from underneath the parking lot south of Burbeck Road that connects outlet 1729 to the trunk that eventually discharges at outfall 1715. No further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	10/18/2023
24-01	7/10/2023	Windshield Inspection	N/A	Water was seen in parking lot of Building 211, coming from pipe running under sidewalk at back of building adjacent to parking lot. Building 211 downspout from roof feeds to a PVC pipe which is clearly the same pipe as the one that comes under the sidewalk. Water seen in pipe, but no water coming from the roof. Water had a trickle flow from the discharge point, it is believed to be A/C condensate from a tie-in within the building. Water was clear, but there was a buildup of red to reddish-pink algae and green algae.	7/10/23: DPW Environmental Contractor Daniel Schlobach and AECOM Intern Luke DeVore responded to flow noticed during a routine windshield inspection. 7/17/23: Updated report sent to MS4 Program Manager to ensure regular cleaning of the pipes/parking lot removes the algae and eliminates the potential for an illicit discharge in addition to street sweeping.	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	7/17/2023
24-02	7/19/2023	Windshield Inspection	N/A	During a windshield inspection of route 3 a mattress was found next to the dumpster south of the Troop Command building. Approximate lat/long of the item is 38.701319, -77.136263.	8/2/23: MS4 Program Manager was notified of the illegally dumped mattress. 10/5/23: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and mattress was still found next to the dumpster. 1/22/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and found the mattress and dumpster were removed. No further action is required.	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/22/2024
24-03	8/4/2023	DPW Inspector	Area Inlet in parking lot	During an inspection of the dumpsters in the parking lot near the golf course clubhouse, several oil slicks were observed in the asphalt and flowing into an area inlet right next to the dumpsters. The area inlet has an unknown structure ID with lat/long coordinates 38., -77.	The oil will need to be properly cleaned up and contained, with extra measures to be taken to remove any oil that made its way into the area inlet and prevent further oil from entering. 8/4/2023: Inspection of the area noted multiple oil slicks on the pavement that flow directly into an unknown area inlet with lat/long 38., -77. Zach Witman and Ashley McMahon were notified of the spill. An estimate of less than 1 gallon of oil was observed in the parking lot. 8/7/23: Zach Witman received the notifcation about the spill and is investigating. 9/8/23: DPW-ENV Contractor Daniel Schlobach followed up on the site during a routine windshield inspection and found no more evidence of motor oil in the parking lot. No further action is required. Refer to photos 5-6 below for more detail.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	9/8/2023
24-04	8/4/2023	DPW Inspector	N/A	During an inspection of the CAP building at DAAF, water was observed leakng from the bottom of a roll off dumpster in the parking lot. The flow line had a brownish color, an obvious sheen was noted in the flow, and a smell of hydrogen sulfide was present. The flow moved down the curb and directly into the adjacent woods, with no obvious sign of the flow entering any MS4 structures.	8/4/23: Inspection of the area noted a leak coming from the bottom of the large roll off dumpster in the parking lot. Upon further inspection, the water was a brownish color and contained an obvious sheen. Notes and photos were taken to document the spill. The flow moved down the curb and into the adjacent woods, and did not appear to make it to any MS4 structures. 9/8/23: DPW-ENV Contractor Daniel Schlobach followed-up on the incident during a routine windshield inspection and found no further evidence of a leak coming from the dumpster. No further action is required. Refer to photos 5-6 for more detail.	Invalid Report/Potential Illicit Discharge/Corrective Actions Required	Closed	9/8/2023

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
24-05	7/25/2023	Direct Notification	4652	On 25 July 2023, AW was notified around 1200 of a potential leak near units 5354 and 5350 on Orchard Court South in Woodlawn Village. AW tested the water and found no presence of chlorinated water entering any curb inlets. Upon further inspection, DPW Environmental Contractor Daniel Schlobach observed the leak to be emanating between cracks in the driveways of both units and flowing down the street. There was heavy algae growth present and a slight smell of decaying organic matter. Two smaller leaks were observed at the end of the driveways for units 5365 and 5363B which were flowing directly into a nearby curb inlet 4652.	7/25/23: AW is notified of the leak at around 1200. They performed tests and did not detect chlorinated water entering the storm system. 7/27/23: DPW Environmental Contractor Daniel Schlobach performed an inspection of the area and documented site conditions. The leak from units 5354 and 5350 flowed down the street though it did not appear to make it into the storm system (photos 1-5). Two smaller leaks coming from the driveways of units 5365 and 5363B flowed directly into a nearby curb inlet 4652 (photos 6-8). 7/31/23: AW notified us that Housing is investigating the leak as this incident was determined to not be within their scope of work (email chain attached). 8/2/23: Housing notified DPW that they are aware of the leak and have been working on a solution (email chain attached). 9/5/23: Received email from AW personnel that the leak was repaired by Housing and no further action is required. 9/8/23: DPW-ENV personnel inspected the area and confirmed the leak has been repaired and no further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	9/8/2023
24-06	8/7/2023	Direct Notification	N/A	During a heavy rain event producing about 0.97" of rain that occurred on the evening of 8/6/2023, the silt fence at the lower end of the SM-1 Decommissioning project site was blown out due to massive amounts of sediment accumulation. The silt fence collapsed and a small amount of sediment made if off-site, however no sediment made it past the chain link fence and into the cove.	8/7/23: The blown out silt fence and sediment accumulation was discovered in the morning by Amentum Project Superintendent Tom Dormer. APTIM Project Engineer Joe Sutton contacted DPW ENV Contractor Daniel Schlobach who performs ESC Inspections of the issue and the planned mitigation measures. 8/8/23: Daniel performed inspection of the site and observed some sediment that made it over the silt fence, but did not make it to state waters. Joe Sutton sent an email on the mitigation measures A2D had implemented: hold off on receiving more backfill until further notice, fixed/reinforced silt fence on lower site in the affected area, cut a diversion ditch on the backfill pad to direct water to another location on site, pumped water out of this area to another location on site, and installed erosion control blankets on the slope of the backfill pit (email is attached to this report). A Corrective Actions form (App E of the SWPPP) is being completed and will be located within the SWPPP. Additional mitigation measures will be relayed to DPW as this issue continues to be addressed. See photos 1-3 below for site conditions. 8/15/23: Photo documentation was sent to DPW confirming the repairs to the silt fence and extension of the rock outlet filter have been completed, in addition to removal of accumulated sediment on and off site. See attached photos 4-5 and email chain.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	8/16/2023
24-07	8/22/2023	Online SW Pollution Report Form	N/A	An anonymous tip from the online stormwater pollution report form was submitted stating the grease trap by the bowling alley was open and the dumpsters in the parking lot of the bowling alley and AFWC were overflowing.	The morning of 8/22/2023 an anonymous tip was submitted via the online stormwater pollution reporting form stating the grease trap by the bowling alley and twod umpsters in the parking lots of the bowling alley and AFWC were overflowing. By the afternoon, the dumpsters were emptied of their contents and the grease trap at the bowling alley was closed. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	8/23/2023
24-08	8/28/2023	DPW Inspector	N/A	During a routine windshield inspection, a couch was found illegally dumped next to the dumpster by the Woodlawn Chapel.	Couch will need to to be disposed of properly to prevent a potential illicit discharge. A Work Order/4283 will need to be submitted to initiate the pickup process. 8/29/23: Report has been submitted to MS4PM for generation of the work order/4283. 10/5/23: Follow-up inspection of the area revealed couch was removed. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	10/5/2023
24-09	8/28/2023	DPW Inspector	3931 and 3929	At approximately 0830 on 28 August 2023, one of the water tanks at tower 2324 had a control issue and had overflown until shut off around 1130. American Water staff estimate about 3,000 gallons of potable water made its way down the access road and into two curb inlets. One of the curb inlets with MS4 structure ID 3931 is located on Gorgas Road (38.720022, -77.145912) and the other with MS4 structure ID 3929 is directly north along a small access road leading up to the water tower (38.720157, -77.145908).	8/28/23: AW personnel responded to an unauthorized discharge coming from water tower 2324 around 0830. Water was shut off around 1130 the same day. DPW-ENV Contractor Daniel Schlobach responded to the scene to document findings and take photos. A VADEQ Pollution Report under ID# 310660 was filed. 8/30/23: VADEQ Pollution Report was closed and the AW 5-day potable water discharge report was received. Repairs were made to the tank and no detrimental environmental/wildlife impacts were observed. See attached files below.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	8/31/2023
24-10	9/8/2023	DPW Inspector		During a follow-up inspection of South Orchard Court in Woodlawn Village regarding the closeout of IDDE Report 24-05, water was found pooled inside curb inlet with MS4 ID 4652. Upon closer look, water was found dripping into the inlet from underneath the pavement and had an obvious sewage/rotten egg smell.	9/11/23: MS4PM and AW personnel notified of the potential sewage leak at Woodlawn Village. 10/11/23: AW notified DPW-Environmental on the status of the leak and confirmed it's not sewage and tested for chlorine. AW stated that this might not be under their jurisdiction and will continue to monitor over the coming weeks. 11/28/23: DPW-Environmental Contractor Daniel Schlobach performed a follow up inspection of the area and confirmed the leak is still present and is discharging into curb inlet with MS4 ID 4652 (see photos 3-6). 11/29/23: Corresponded with AW personnel to confirm this issue is under Fort Belvoir Community Housing's (FBCH) jurisdiction. 12/11/24: Housing sent results of their investigation of the leak and found chlorine levels at 0.5 mg/L, which is hinting towards a potable water line leak. Further investigation is required. 2/6/24: DPW-ENV Contractor Daniel Schlobach performed a dry weather inspection of the area and observed water still leaking directly into the curb inlet 4652. The leak is most likely due to a cracked potable water pipe that runs near the impacted curb inlet and further investigation will be required to determine the source. 5/2/24: AW personnel notified DPW-ENV and Housing of work performed near curb inlet with MS4 ID 4652 regarding the leak. The work was performed right up against 5369 Orchard Court South, and is potentially related to the leak found inside the inlet The leak was fixed immediately even though though it was outside their POD. AW recommended to Housing to further investigate the area to determine the source of the leak as water is still pooling inside the curb inlet. Please see photos dated 5/2/2024 and attached email dated 4/30/2024 for more details.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	
24-11	9/14/2023	Direct Notification	N/A	A fuel leak coming from an AECOM truck was discovered on a concrete surface at NGA Dock A at around 0830.	9/14/23: At around 0830 a diesel fuel leak coming from an AECOM truck was discovered on the concrete surface by Dock A at NGA. The truck was removed at 0930 and sent for repairs. Around 1245, Environmental Specialist Frank Burbank arrived and determined no cleanup was needed as the stain was dried to the sun and steady winds. The stain was approximately 18 inches in diameter. Waiting on photo documentation to write up and close out incident report. 10/17/23: Obtain photo documentation from NGA to closeout the report. No further action required.	Invaild Report/Potential Illicit Discharge/No Corrective Actions Required	Closed	10/19/2023
24-12	10/18/2023	Direct Notification	N/A	Spill is a petroleum-based product and is believed to have occurred on either 10/14 or 10/15 by the generators behind the Central Utility Plant (CUP). The spill is about 126 sq. ft in size with a majority of the spill contained to the asphalt. A small portion of the spill made it to the soil between the driveway and foundation of Generator 2. The source of the spill is unknown.	10/18/23: Environmental Specialist Frank Burbank responded to the spill and took photographs. Amentum/Parks containerized the contaminated soil and used absorbent material (kitty litter) to the asphalt to remove staining. Notice was provided to Ft. Belvoir. Arrangements for soil sampling are being made. The area has been covered to protect soil from the elements until sampling is completed. 11/29/23: Corresponded with NGA and received notification that they are still waiting for impacted soil to be disposed of and two rounds of soil testing was performed. The first round of testing indicated the soil was still very contaminated, so more soil was dug out and re-sampled a second time. 12/20/23: Received notification that the waste soil is prepped and ready for disposal, they are just waiting on final approval from Fort Belvoir. 1/10/24: The signed Material Characterization Report (attached) was submitted by the Hazardous Waste Program Manager confirming two drums of soil will be transported and disposed of. See attached email chain confirming all work on this incident has been completed. No further actions are required. 2/6/24: Impacted area was backfilled with fresh soil 2/22/24: Photo documentation was cleared by NGA Security and submitted to DPW-ENV Contractor Daniel Schlobach. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/22/2024
24-13	10/24/2023	Direct Notification	N/A	The Aboveground Storage Tank (AST) containing fuel oil #2, or heating oil, was discovered by Aleut to be leaking behind Bldg 780 during a routine fill on 10/24/2023. It was estimated around 400 gallons of fuel oil #2 had leaked from the AST.	10/24/23: Aleut reported the spill to Petroleum and Spill Response Program Manager, Zach Witman, during a routine fill. Zach Witman responded to spill and a drip pan was placed underneath the tank. 10/25/23: The remaining fuel inside the tank was pumped out and a tarp was placed over the tank and the surrounding soil. Zach Witman notified the National Response Center (NRC) and VADEQ of the spill and corrective actions taken. VADEQ guidance required two (2) soil samples taken at either end of the tank will need to be submitted before a remediation strategy can be devised. 10/26/23: Zach Witman ordered two (2) soil samples, with results still pending. DPW-ENV Contractor, Daniel Schlobach, performed an inspection of the area and documented current site conditions. See attached photos 1-2, Fort Belvoir Spill Report, NRC Spill Report, DEQ correspondence, and site map for more details. 2/26/24: Soil sample results were received (attached) and it was determined by DEQ that soil remediation was necessary. A Work Order/4283 (attached) was submitted to remove impacted soil and backfill the area with the start and completion dates still pending. The old AST was replaced with a new unit. 4/22/24: During the Earth Day event at Bldg 780, DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and noted the new AST. The contaminated soil has yet to be removed.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Open	

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
24-14	10/26/2023	Direct Notification	N/A	AW contractors were in the area behind Bldg 1000 and noticed a SSO around 1125. The discharge originated from a manhole near MS4 structure 686 and made its way down the slope and stopped approximately 15-20 feet from the stream. There was an obvious smell of sewage coming from the discharge and the water was gray in color.	10/26/23: At approximately 1125 AW contractors reported sewage discharge coming from a sanitary sewer manhole behind Bldg 1000. Efforts were made to stop the blockage and the water was turned off which prevented the discharge from entering the nearby stream. DPW-ENV Contractor, Daniel Schlobach, arrived at the scene to document site conditions. Upon arrival, AW personnel were spreading approximately 10-15 lbs of lime over the discharge as a corrective action (refer to photos 1-10 and site map for more details). Will need to determine who owns the sewage line to determine responsibility for repairs. 11/2/23: AW summarized all corrective actions that were performed regarding the SSO: blockage and lines were cleared, rags were raked up and manhole was washed, approximately 10-15 lbs of lime was applied to the impacted area, SSO was reported to DPW ENRD, and housing was contacted regarding the excessive rags and grease coming from Cedar Village (see attached emails). 11/2/23: The plans for Cedar Village were reviewed and it was discovered that housing had tied into the existing sewer line as a part of the Cedar Grove project, making housing the responsible party. Need housing to provide answers to several questions: does housing have any form of PM for their sewers such as pipe or manhole inspections or a FOG or CMOM plan and do they have a response plan in place for emergencies? See attached emails and project plans for further detail. 1/10/24: Received email correspondence from AW personnel that housing was notified and the issue was rectified. AW advised housing develop a FOG or PM program to prevent issues like these from happening again. 1/11/24: DPW-ENV Contractor Daniel Schlobach inspected the area and found no further signs of the SSO in the surrounding area. No further actions required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/16/2024
24-15	11/1/2023	Direct Notification	N/A	Inspection of the dumpster by Bldg 2116 confirms the dumpster is broken and trash is leaking out of the bottom. Initial notification about the broken dumpster was sent by the buildings Facility Manager on 11/1/2023.	11/1/23: Solid Waste Program Manager was notified of the issue and will replace dumpster when one is available. See attached email chain for more detail. 11/7/23: Report distributed to Bldg 2116 Facility Manager and Solid Waste Program Manager. 5/2/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the parking lot and found the dumpster was replaced and all excess trash was picked up. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	5/7/2024
24-16	11/6/2023	DPW Inspector	N/A	During an inspection of the dumpster by Bldg 2116, it was observed the dumpster by Bldg 2118 was also broken at the bottom and trash was spilling from the bottom.	11/7/23: Report distributed to Bldg 2118 Facility Manager and Solid Waste Program Manager. 5/2/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and found the dumpster has been replaced. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	5/7/2024
24-17	11/8/2023	Direct Notification	253	American Water (AW) was alerted at approximately 0901 on 11/8/2023 of a water main break off of Shenandoah Road in River Village. As estimated 2,000 gallons of potable water made its way into a nearby storm drain with MS4 structure ID 253. No wildlife of environmental impact was observed by AW staff.	11/8/23: AW personnel responded to the water main break and were able to isolate and shut off the water at around 0925. A DEQ pollution report was filed under report number 311477. AW is waiting on DIG Permit approval before making the necessary repairs. A 5-day report will be generated. 11/14/23: DEQ pollution report 311477 was closed out. 12/7/23: Received confirmation from AW personnel that the repairs were made to the lines and no further action is required. The DIG Permit and 5-day report have been attached for reference. 12/19/23: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the site to confirm the repairs have been made. Please see attached photos for reference. Report can be closed out.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	12/20/2023
24-18	11/10/2023	Direct Notification	1291	A main break was discovered by American Water (AW) personnel in River Village at 0730. Approximately 90,000 gallons of potable water discharged from the break and made its way to the storm system via MS4 structure 1291 located approximately at 38.706729, -77.127666. No environmental or wildlife impact was observed.	11/10/23: AW personnel responded to the water main break and were able to isolate and shut off the water. A DEQ pollution report was filed under report number 311500. AW is waiting on DIG Permit approval before making the necessary repairs. A 5-day report will be generated. 11/14/23: DEQ pollution report 311500 was closed out. 12/7/23: Received confirmation from AW personnel that the repairs were made to the lines and no further action is required. The	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	2/1/2024
24-19	11/6/2023	Direct Notification	N/A	A complaint regarding the improper use of Erosion and Sediment Control (ESC) measures at the Davison Army Airfield (DAAF) for the DAAF Fueling Facility Project was brought to the attention of the MS4 Program Manager.	11/6/23: DPW-ENV Contractor Daniel Schlobach inspected the project site and found no improper use of ESC measures. Site had already completed work and had seeded and mulched areas at final grade for site stabilization. Please see photos 1-6 for more details.	Invaild Report/Potential Illicit Discharge/No Corrective Actions Required	Closed	11/15/2023
24-20	11/13/2023	Direct Notification	N/A	American Water (AW) personnel received a notification around 1500 of a sewer backup at 9256 Potomac Loop at River Village. An estimate of 3-5 gallons of sewage water discharged onto the resident's patio with none entering the storm system.	11/13/23: AW personnel responded to the sewage line backup at 9256 Potomac Loop at River Village and were able to clear the blockage within 30 minutes. AW personnel will TV the lines to ensure the blockage is completely cleared. 11/17/23: AW personnel corresponded with DPW-ENV Contractor Daniel Schlobach and found no additional blockage in the sewage line after inspecting the line via a camera. No further actions are required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	11/17/2023
24-21	11/17/2023	Direct Notification	N/A	A resident of Lewis Village notified the Hazardous Waste Program Manager (HWPM) Nicole Cahalan of grounds workers testing waterborne traffic paint in the wood line along the corner of Woodlawn Road and Duane Road. Approximate lat/lon location of incident: 38.715592, -77.141457.	11/17/23: HWPM Nicole Cahalan spoke with the crew supervisor Ezequiel Morales to ensure paint is not being tested on organic materials. A thin layer of paint on the impacted soil was removed along with impacted vegetation. He indicated he will re-cover the area with organic soil, re-seed it, and place hay on top. HWPM and HWAS managers reviewed the paint Safety Data Sheet (SDS) and determined it to be non-hazardous/non-toxic (see attached). 11/20/23: Personnel provided photos documenting the impacted soil and vegetation was removed and the area was seeded and strawed (see photo 11). No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	11/21/2023
24-22	12/5/2023	DPW Inspector	N/A	During a routine windshield inspection of route 7, two issues were noted at the golf course maintenance facility: 1) A stockpile of sand was found dumped near Bldg 2991 onto the asphalt and is not being properly stored (see photo 1). Approximate location of the stockpile: 38.735764, -77.165165. 2) A mass amount of bulk furniture was found dumped behind Bldg 2991 and is not being properly stored prior to disposal (see photo 2). Approximate location of the bulk furniture: 38.736222, -77.165807.	1) The sand stockpile will need to be cleaned up and stored under the proper conditions to prevent a potential illicit discharge. 2) The bulk furniture will need to be stored in a manner that prevents a potential illicit discharge from occurring prior to disposal. 3/14/24: During a routine windshield inspection of the area, two large stockpiles of sand/dirt were still observed on the asphalt. The bulk trash was placed inside a large roll-off dumpster. 4/3/24: DPW-ENV Contractor Daniel Schlobach spoke with the Golf Course Superintendent regarding the improper storage of materials via phone call. 4/11/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and found both large stockpiles to be gone. However, sand and dirt did remain on the pavement and will need to be swept up prior to closeout as this still has the potential to be an illicit discharge. Please see attached photos dated 4/11/24. 5/2/24: Follow-up inspection was performed and the sand and dirt was still present in the maintenance area. This will need to be properly swept up and removed. 6/13/24: Follow-up inspection was performed and the sand and dirt was still present in the maintenance area. This will need to be properly swept up and removed.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Open	
24-23	12/5/2023	DPW Inspector	N/A	During a post rainfall inspection of the George Washington (GW) Village Stream Restoration project, it was noted that silt fencing at the site entrance and near the culvert influent was either not installed properly or needed to be repaired. This issue falls under the responsibility of MASTEC to fix as per DIG Permit 23-119.	12/6/23: The Erosion and Sediment Control (ESC) Inspection Report for George Washington Village dated 5 Dec 2023 was submitted to the respective proponents outlining the issue, including MASTEC as the responsible party for correcting this deficiency. 12/12/23: Follow-up inspection of the site showed repairs were attempted, but were not sufficient enough. Report sent back to proponents on 12/13/23 to ensure silt fence is properly repaired. 12/19/23: Routine inspection of the GW Village site confirmed silt fencing has been successfully repaired and site re-stabilized. Please see attached photos 8-11 for reference.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	12/20/2023

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
24-24	12/11/2023	Direct Notification	6823	A grease trap near the Fort Belvoir Community Hospital (FBCH) had become clogged causing grey water and grease to overflow and seep into the surrounding soil and a nearby stormwater trench with MS4 structure ID 6823. The spill covered an area of approximately 25' by 6' (150 sq. ft.) of soil and concrete. Approximately 20 gallons of grey water and 2 gallons of grease was discharged.	12/7/23: Once the spill was discovered, facilities notified the cafeteria to halt all activities. Absorbent materials (absorbent sock/pillow) were laid out to absorb the grease and the remaining grey water and grease was pumped out of the trap, and any remaining grease and spill material was removed. Capital Tank and Drain then took the collected spill material and remaining liquid and transported it to their facility. Currently awaiting feedback from Capital Tank and Drain to determine if the spill was caused by excess grease build-up in the trap or from a rag. 12/8/23: Spill report generated by the A.T. Augusta Military Medical Center (ATAMMC) was submitted outlining corrective actions made. Please see the attached report for more details and photos on the corrective actions made. 12/12/23: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the site and found grease residue present in the grass and a strong smell of grease in the immediate area. Please see photos 1-4 showing the remaining grease residue. 12/15/23: DPW-ENV Contractor Daniel Schlobach emailed the ATAMMC Hazardous Waste PM Mr. Ricardo Perez regarding additional cleanup actions that may need to occur at the site of the spill - the spill report did not indicate if the grease that made its way to the stormwater trenched was cleaned out, and if there have been discussions on removing the impacted soil that came into contact with the grey water and grease. 2/6/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area to determine if grease residue is still present. Grease was still present in the area as the smell was very strong, however no evidence of grease was found near the adjacent stormwater trench. Soil remediation efforts should be made to remove the affected soil. Please see photos 7-9 for more details. 5/2/24: Follow-up inspection of the areas was performed and a strong odor of grease was still present as you approach the site. Grease residue is still present on the ground and there are black sections of the grass and soil where stagnant grease has been sitting for months. Soil remediation efforts are strongly encouraged ASAP to remove the impacted soil and remaining grease residue. Please see photos 10-13 for more details. 5/8/24: ATAMMC HW PM was notified of the grease residue still present in the area.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	
24-25	12/13/2023	Direct Notification	N/A	In the late night hours of 12/13/2023 a hydraulic lift malfunctioned causing approximately 2 gallons of hydraulic fluid to spill. The cause of the release was due to a failure of the seal/fitting on the outdoor hydraulic lift. The fluid made its way into a nearby stormwater catch basin, but was isolated within the pad drainage system. The incident occurred at the Amazon Pad 2 - MDC 5 Hydraulic lift at ADF-E.	12/14/23: Fort Belvoir Fire Dispatch was notified of the spill around 1039, VADEQ Emergency Management Dispatch was notified around 1322, ADF-E EHS office was contacted around 1301, and NRC was notified around 1304. Spill response vendor arrived around 1200 and began the cleanup process. Absorbent materials and pads were placed to clean and isolate the spill. Cleanup was completed at around 1330 and all remaining spill materials were removed from site. No photos were taken due to security constraints. 12/18/23: ADF-E EHS notified DPW-ENV of the spill. 12/20/23: DPW-ENV received the spill reports generated by Amazon Data Services. Based on the spill reports, the spill was contained and no further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	12/20/2023
24-26	12/18/2023	Direct Notification	N/A	At approximately 0400 on the morning of 12/18/2023, American Water (AW) personnel discovered a Sanitary Sewer Overflow (SSO) that occurred at the AW Lift Station (LS) 687. There was a pump down scheduled for 12/20/2023, but due to the large amount of rain received over the weekend the water had overflowed. An estimated 750-1,000 gallons was discharged and the spill did not make it to the storm system or had any impact on wildlife.	12/18/23: AW personnel notified DPW-ENV of the spill and submitted DEQ Pollution Report 311884. Later in the morning, the water that had collected in the concrete holding apron for the sludge container had drained as the water levels in the wet well receded. 12/19/23: DPW-ENV Contractor Daniel Schlobach performed an initial inspection and documented site conditions. No further indication of an overflow was present. VADEQ Pollution Report 311884 was closed out and no further actions are required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/3/2024
24-27	12/19/2023	DPW Inspector	N/A	During a routine Erosion and Sediment Control (ESC) Inspection of the George Washington (GW) Village Stream Restoration, it was noted that a small portion of silt fence leading to the culvert entrance has been damaged and has partially collapsed. It was determined that the work associated with this part of the project is through American Water (AW) under DIG Permit 23-108, and that AW is responsible for repairing the silt fence.	12/19/23: DPW-ENV Contractor Daniel Schlobach notified AW personnel of the issue. 1/11/24: DPW-ENV Contractor Daniel Schlobach performed an inspection of the project site and noted sections of silt fence were damaged from the heavy rain event on 1/9/24. AW confirmed that the fencing identified on 12/19/23 was repaired prior to the heavy rain event. AW personnel were notified of the issue and confirmed repairs will be made early next week. 1/17/24: AW personnel confirmed that the necessary repairs were made to the damaged silt fencing. Photo documentation was provided (see photo 6) and no further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/18/2024
24-28	12/22/2023	Direct Notification	N/A	At Davison Army Airfield (DAAF), a potable water discharge from a water main break near the Civil Air Patrol (CAP) building was discovered at around 1541 and discharged approximately 2,000 gallons into the surrounding area. The discharge did not make it into the storm system, but pooled in a low-lying swamp area and was contained. No adverse impacts on wildlife or the environment were observed. Approximate lat/long coordinates of the water main break: 38.715078, -77.186323.	12/22/23: American Water (AW) personnel notified DPW-ENV of the potable water discharge from a water main break at around 1938. The break was discovered at around 1541 on the same day, and the VADEQ Pollution Report 311953 was filed. 12/26/23: Repairs to the water main were performed and VADEQ Pollution Report 311953 was closed out. Waiting for final inspection by DPW-ENV to document site conditions and confirm repairs were made prior to final closeout.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/22/2024
24-29	1/3/2024	Direct Notification	N/A	The spill was observed along the length of Barta Road towards the intersection of Heller Road near the North Area Fire Station. The spill was noted along the right-hand lane of east bound Barta Road and began across from the middle pedestrian bridge leading from the Overflow parking lot. The spill continued down past the stop sign for the Overflow parking lot, then veered right onto the exit lane for Heller Road and stopped halfway through the exit curve. The trail consisted of a wet center line about 6" wide and on either side of the line was a splash zone, with a total width of about 18" to 20". The spill is suspected to be automobile transmission fluid and approximately 1-2 gallons was spilled onto the roadway, with the total length of the spill being approximately 1,500 feet. The spill did not make it into the storm system.	1/3/24: Spill reported to NGA after it was observed on Barta Road around 1400. Spill was responded to and it was assumed that the spill was due to a car's transmission fluid leaking. Due to the nature of the spill, it is recommended that no cleanup efforts be initiated as the spill did not pool and will likely dry on its own. 1/10/24: DPW-ENV Contractor Daniel Schlobach review the spill report and concurred with the recommendation provided by NGA. No further action is needed.	Invaild Report/Potential Illicit Discharge/No Corrective Actions Required	Closed	1/18/2024
24-30	1/9/2024	Direct Notification	N/A	American Water's (AW) Lift Station (LS) 687 was found to be overflowing at approximately 2015 on 1/9/2024. Due to the high volume of rain (approximately 2.5") the pumps at the LS were unable to keep up with the rainfall and the wet well began dumping into the two designated overflow tanks. It was hard to determine if the overflow made its way to Gunston Cove, however the station continued to pump down the excess water throughout the night. Approximately 1,751 gallons of sewer overflowed into the surrounding area in addition to approximately 44,707 gallons of infiltrated rain water. No signs of grey water were present around the LS indicating no impacts to wildlife or the surrounding area. a DEQ pollution report was filed under report number 312153.	1/9/2024: AW personnel respond to the overflow at LS 687 and worked to pump down the excess water until the overflow stopped. This was due to the heavy rainfall the occurred all day on 1/9/2024. AW personnel investigated the immediate area surrounding the LS and found no signs of sewer water near Gunston Cover or near any MS4 structures. 1/10/24: A VADEQ Pollution Report was filed under report number 312153. Waiting for the DEQ report to be closed before recommending closeout. 1/11/24: VADEQ Pollution Report 312153 (attached) was closed out and no further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/16/2024
24-31	1/25/2024	DPW Inspector	4169	During a routine Erosion and Sediment Control (ESC) Inspection of the INSCOM Phase IV Project, motor oil was observed near the loading dock at the current entrance to the site. The motor oil was dispersed due to the rain and made its way into the nearby storm inlet with MS4 structure ID 4169. Approximately 1 gallon of motor oil was observed and site personnel were immediately notified.	1/25/24: DPW-ENV Contractor Daniel Schlobach notified the Responsible Land Disturber (RLD), Josh Roe, for the INSCOM Phase IV project of the motor oil spill. A nearby spill kit was utilized and absorbent pads were being placed on the spill as Mr. Schlobach was leaving the site. The MS4 Program Manager and Petroleum and Spill Response Program Manager were notified of the spill. 1/30/24: During a post rainfall inspection of the construction site, the site of the spill was inspected and no further evidence of the spill remains. Inlet protection was placed around storm inlet 4169 and all remaining motor oil was properly cleaned up. No further actions remain.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	1/31/2024
24-32	1/25/2024	DPW Inspector	N/A	During a routine Erosion and Sediment Control (ESC) Inspection of the Bldg 386 HPTC Project, motor oil was observed in the parking lot close to the construction entrance of the project. Site personnel were notified and upon further investigation it was determined not to be affiliated with the ongoing construction work. Approximately 1 gallon of motor oil was observed and did not make it to the storm system.	1/25/24: DPW-ENV Contractor Daniel Schlobach observed the spill and notified Bldg 386 HPTC Project personnel and determined the spill was not affiliated with this project. Site conditions were documented and photos taken of the spill. The MS4 Program Manager and Petroleum and Spill Response Program Manager were notified of the spill. 1/30/24: During a routine inspection of the nearby construction site, no further evidence of motor oil was observed in the parking lot. This area will be monitored for any subsequent spills during the construction inspections of the Bldg 386 HPTC Project. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	1/31/2024
24-33	1/29/2024	Direct Notification		A backflow preventer device near the Hospital was found leaking during the afternoon of 1/29/2024. An estimated 60 to 80 gallons per hour (GPH) has been leaking from the backflow preventer since the discovery of the leak. It should be noted that a storm pond is directly adjacent to the device just north of Doerr Road and the leak has most likely made its way into said pond.	1/30/24: AW personnel contacted DPW-ENV Contractor Daniel Schlobach regarding the backflow preventer device leak. 2/2/24: AW and Hospital personnel have scheduled to meet the following week to discuss the leaking backflow preventer device issue and determine responsibility for repairs. 2/6/24: DPW-ENV Contractor Daniel Schlobach performed an initial site investigation and determined no water from the leaking BFP made its way into the storm system and into the adjacent storm pond. The BFP was shut off on 2/5/2024 and the leak stopped. The BFP was determined to be a DPW asset and DPW is the responsible party for performing the proper repairs.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Open	
24-34	1/30/2024	DPW Inspector	N/A	During a post rainfall inspection of the GW Village Stream Restoration Project site, muddy tire tracks were observed leading away from the site down Statesman Road which were from a survey crew affiliated with Washington Gas. This is a violation of Virginia DEQ Minimum Standard 17 (MS-17) on proper construction entrance use and keeping roadways free of sediment and sediment tracking. Since the gas relocation work is under a separate plan, it is the responsibility of Washington Gas to fix any deficiencies caused while working on the site. Pleas see the attached ESC Inspection Report dated 1/30/2024 for more details.	2/5/24: Mud tracked onto Statesman Road was properly cleared.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/7/2024

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
24-35	1/30/2024	Direct Notification	N/A	A sewer backup occurred around 1745 on 1/30/2024 close to the intersections of Moyer and Maloney Roads near Dogue Creek. An estimated 75 gallons of sewage water made its way onto the surrounding sidewalk and grassy area and no signs of gray water, smell, or toilet paper was present near the closest outfall and the backup did not make it to state waters. AW staff was able to contain and stop the blockage around 2000 on 1/30/2024.	1/30/24: AW staff were notified of the sewage backup around 1745 and were able to respond and contain the backup by 2000. Additional manholes in the immediate area were investigated to check for any more blockages. 1/31/24: AW staff contacted DPW-ENV Contractor Daniel Schlobach regarding the sewage backup and placed lime around the impacted area as part of the cleanup process. 2/6/24: DPW-ENV Contractor Daniel Schlobach performed an inspection of the area and found no further evidence of the sewage backup. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/7/2024
24-36	2/5/2024	Direct Notification	N/A	At approximately 0900 on 2/5/2024, transmission fluid from the cab area of one of the dump trucks at the AW Streams 3, 12, & 13 project site was discovered on one of the access roads. Approximately less than one gallon of transmission fluid spilled from the truck and a crew quickly deployed the spill kit and began remediation efforts. The affected mulch was bagged and removed from the site.	2/5/24: RES staff notified DPW-ENV Contractor Daniel Schlobach of a transmission fluid spill coming from the cab of a dump truck on one of the access roads at around 0900. The spill kit was quickly deployed and the impacted mulch was bagged and removed from the site. 2/6/24: DPW-ENV Contractor Daniel Schlobach performed a field investigation of the area and found no further evidence of transmission fluid. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/7/2024
24-37	2/7/2024	Direct Notification	N/A	Generators 1, 3, and 5 at the ADF-E Generator Project were being tested when diesel fuel was spotted leaking from the bottom of generator 3. Upon further inspection it was observed that both generators 3 and 5 were leaking from the bottom due to the manual fuel return valves for both generators were open, which caused fuel to backflow into generator 1. Approximately 5 gallons from each generator spilled onto the pads and surrounding area (10 gallons total).	2/7/24: Diesel fuel spill was identified and spill kit was deployed. The spill was successfully contained and PIG absorbent mats/kitty litter were used to soak up the spilled fuel and prevent the discharge from entering the storm system. Extra kitty litter was deployed on the spill throughout the day to ensure all diesel fuel was cleaned up, and the spill materials were properly disposed of after use. DPW-ENV Contractor Daniel Schlobach will perform a follow-up inspection of the site during the next Erosion and Sediment Control (ESC) Inspection of the ADF-E Generator Project scheduled for next Tuesday (2/13/2024). No photos were taken due to security constraints. 2/13/24: DPW-ENV Contractor Daniel Schlobach was performing a routine ESC inspection of the site and found no further evidence of the diesel fuel spill. No photos were taken due to security constraints. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/13/2024
24-38	2/13/2024	Direct Notification	N/A	A commercial truck with a hydraulic man-lift (cherry picker) struck the low overhead clearance barrier at high speeds, and the complete hydraulic lift mechanism was ripped clear off the truck and caused approximately 4 gallons of hydraulic fluid to spill in the immediate area (pool was approximately 8 by 10 feet in diameter). A thin trail of hydraulic fluid flowed from the site of the crash approximately 150 feet down Barta Road and was approximately 6-10 inches wide.	2/12/24: Site police had closed the east and west bound lanes of Barta Road and a crane and flatbed truck arrived to remove the broken lift. The lift was inspected and found it had stopped leaking hydraulic fluid. Loose absorbent had been spread over the pools of hydraulic fluid that spilled underneath the broke lift and over the trail of fluid that made its way down Barta Road. Absorbent booms and socks had been placed at the end of the trail to prevent its further spread. By 0800, the spill had been contained. By 1015, the hydraulic lift was loaded onto the flatbed for removal. The loose absorbent, absorbent booms, socks, and debris was removed from the site of the accident. The repairs were completed and Barta Road was reopened by 1130. 2/13/24: NGA personnel notified Fort Belvoir DPW-ENV of the incident and submitted the spill report and photo documentation. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/14/2024
24-39	2/13/2024	DPW Inspector	2142	During a routine Erosion and Sediment Control (ESC) Inspection of the Bldg 386 HPTC Addition Project, sediment was observed spread over the parking lot near a vehicle storage area. The sediment came from a construction site, however upon further investigation it was determined that the sediment did not come from the Bldg 386 HPTC Addition Project. As a result of the rain event on the morning of 2/13/2024, the sediment was found discharging into the nearby storm inlet with MS4 ID 2142 which flows directly into a nearby storm pond.	2/13/24: DPW-ENV Contractor Daniel Schlobach discovered the incident during a routine ESC inspection of a project site in the area, and notified site personnel. 2/20/24: Jason Grzegorczyk, the Facilities Operations Specialist for the 300 Area, was notified of the incident and performed an inspection of the area. The Bldg 386 HPTC Addition Project was determined to be the responsible party and was able to clear the sediment and provide inlet protection to the curb inlet with MS4 structure ID 2142. 2/27/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and determined the incident can be closed. No further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	2/27/2024
24-40	2/21/2024	Direct Notification	N/A	A hydraulic fluid spill at the Area Maintenance Support Activity (AMSA) 91 was discovered around 1500 on 2/21/2024 during a test drive of one of the vehicles. The spill was located at the entrance/exit gate to the facility and approximately 1 ounce of fluid spilled from the vehicle. The spill was immediately contained and it did not make it to the storm system. Dry sweep was used to soak up the spill and was collected and disposed of.	2/21/24: The spill was discovered around 1500 and containment began shortly after discovery. Dry sweep was used to soak up the spill and the absorbent material was then gathered and properly disposed of. The spill did not make it to the storm system. A spill report was generated and submitted to document the incident. No photos of the initial spill and cleanup were taken. A final inspection of the area will occur to document final conditions and determine if incident can be closed out. 2/29/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and found no further evidence of the hydraulic fluid spill. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	2/29/2024
24-41	2/27/2024	DPW Inspector	N/A	During a routine ESC Inspection of the Burbeck Road Drainage Area Improvements project, multiple oil droplets were found along the length of Burbeck Road. An estimated 2 cups of oil was found spill and dispersed throughout the project site. The motor oil was most likely from heavy equipment being used on the site as it is an active construction project. The motor oil had not made it into the storm system.	2/27/24: DPW-ENV Contractor Daniel Schlobach was performing a routine ESC Inspection of the Burbeck Road Drainage Improvements Project when several motor oil droplets were observed along the road. Site conditions were documented and photos taken of the spill. 2/28/24: The MS4 and Petroleum & Spill Response Program Managers were notified of the spill. The ESC Inspection Report for this site noted the motor oil spill and the site manager was notified of the spill via email. The attached inspection report shows the stretch of Burbeck Road where this project is taking place. 3/7/24: DPW-ENV Contractor Daniel Schlobach was performing another ESC inspection of the project and observed all of the identified motor oil droplets cleaned up, and no evidence of the motor oil was found across the entire site. See photo 6 for more details. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	3/7/2024
24-42	2/2/2024	Direct Notification	N/A	Around 1330, free-standing oil, petroleum contaminated soil, and four full or partially full containers of motor oil was observed in Rossell Village between the garages of units 5528 and 5526 Caldwell Road. Motor oil footprints were also seen scattered around the immediate area, indicating someone had walked through the oil spill. Approximately five gallons of oil had spilled, however the spill did not make it to the storm system.	2/2/24: The motor oil spill was discovered at around 1330 and by 1400 utility locators arrived and marked the subsurface utilities in the area of the spill. Apex then applied oil-absorbent material to the area of free-standing oil, manually excavated the contaminated soil and containerized it in a 55-gallon drum, temporarily stored oil containers and oil-water mix with absorbent material, visually inspected the nearby storm drains and found no evidence of the spill, and cordoned off the area for safety purposes. Apex then contracted the transport and disposal of the contaminated soil, spend absorbent materials, and remaining oil. Apex left the site at around 1720. 3/1/24: Received the spill report issued by The Michaels Organization from the Petroleum & Spill Response Program Manager Zach Witman. DPW-ENV Contractor Daniel Schlobach will perform a follow-up inspection of the area to see if the impacted area has been backfilled and no more motor oil is found at the site. 3/7/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection and found the impacted area had been backfilled and properly stabilized. See attached photos 9-10. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	3/7/2024
24-43	3/29/2024	Direct Notification	253	A water main break occurred along Shenandoah Road in River Village around noon on 3/29/2024. The water was shut off and four buildings were without water while repairs were being made. Approximately 5,000 gallons made its way into the nearby curb inlet with MS4 structure ID 253, though no environmental impacts were noted during this discharge.	3/29/24: Water main break was discovered by Housing and reported to American Water (AW) around noon, and the water was shut off while repairs were being made. DEQ pollution report 313373 was filed as about 5,000 gallons made its way into a nearby curb inlet with MS4 structure ID 253. Emergency DIG Permit 24-107 was submitted and repairs were eventually completed later in the day. Will closeout report once follow-up investigation is performed. 4/3/24: DEQ Pollution Report 313373 was closed out. 4/4/24: Follow-up inspection was performed by DPW-ENV Contractor Daniel Schlobach and found no further evidence of the illicit discharge occurring. No further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	4/4/2024
24-44	4/1/2024	Direct Notification	BMP 3028	Aleut notified DPW-ENV during BMP inspections that BMP 3028 was filled with a lot of sediment from the nearby construction work. DPW-ENV Contractor Daniel Schlobach performed an inspection of the BMP and confirmed that sediment had indeed entered the BMP. The surrounding banks of the BMP are not properly stabilized and exhibited some erosion. Further erosion will cause more sediment to accumulate within the BMP. DIG Permits 23-027 and 23-050 pertain to the work performed in the area which involved installing the generator and connecting it to the nearby transformer, respectively.	4/1/24: Aleut notified DPW-ENV regarding sediment accumulation inside BMP 3028 due to the nearby construction work. 4/3/24: DPW-ENV was able to provide the DIG Permits relevant to the construction work by Bldg 1458. 4/4/23: DPW-ENV Contractor Daniel Schlobach performed an inspection of the area to take photos and document site conditions. Both companies, PowerSecure and MASTEC, were contacted via email to determine who is the responsible party for performing maintenance on the bioretention pond. 4/29/24: DPW-ENV Contractor Daniel Schlobach determined that the repsonsible party for performing the proper repairs is PowerSecure by comparing photos taken by PowerSecure post-construction and photos taken by Aleut/Daniel Schlobach during the field investigations.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	
24-45	4/3/2024	Direct Notification		Placeholder for the spill at DAAF.	Placeholder for the spill at DAAF.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	
24-46	4/11/2024	DPW Inspector	1737	During a routine windshield inspection of the 300 Area, a large patch of disturbed earth was discovered at the edge of a parking lot near Wilson Road. The disturbed sediment had made its way into the nearby storm inlet with MS4 structure ID 1737 and made its way onto the roadway. There were vehicle tracks all over the ground indicating the ground was disturbed due to vehicle traffic.	4/11/24: DPW-ENV Contractor Daniel Schlobach was performing a routine windshield inspection of the 300 Area and observed the disturbed area. Upon closer look sediment had clearly entered the storm system via storm inlet with MS4 structure ID 1737. The MS4 Program Manager and 300 Area POC were notified of this issue. 4/12/24: Received notification from 300 Area that the issue was due to heavy equipment parked on the grass near the parking lot and tore up the area and are currently fixing the issue. DPW-ENV Contractor Daniel Schlobach will perform a follow-up inspection of the area once work has been completed. 4/15/24: Received confirmation from 300 Area that the issue has been fixed. Follow-up inspection required to confirm that the repairs are sufficient. 4/18/24: Follow-up inspection was performed and confirmed the area has been fixed and inlet is properly protected. No further action is needed.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	4/18/2024

Fort Belvoir Incident Number	Date Discovered	Discovery Method	MS4 Structure ID#	Description of Illicit Discharge	Corrective Action	Validity	Status	Date Closed
24-47	4/16/2024	Direct Notification	N/A	AW personnel were performing routine PM's and vac trucked out Lift Station's (LS) 769 and 685 when they noticed a fuel product present within one of the sludge containers. Approximately 5 gallons of the fuel product was present within the sludge container. Investigation of the area confirmed that a fuel smell was coming from LS 769 and that the source of the fuel was further upstream of the LS. The source of the fuel was not discovered and it is assumed someone may have dumped a fuel product into a manhole upstream of LS 769.	4/16/24: At approximately 1430 AW staff observed a fuel product within one of the sludge containers at LS 687. An investigation ensued and it was observed that the fuel most likely originated near several manholes near LS 769. Absorbent booms were placed within the sludge container to absorb the remaining fuel product. The MS4 Program Manager was notified in addition to DPW-ENV Contractor Daniel Schlobach. 4/17/24: AW personnel contacted DPW-ENV Contractor to schedule a time to perform an inspection. 4/18/24: DPW-ENV Contractor and AW personnel performed a follow-up inspection of the area and it was determined the origin of the fuel source was near the outdoor recreation center. Fuel odor was very obvious at manholes 07-064 and 07-040, and no fuel was detected at any upstream manholes. These manholes will be washed out to remove any remaining fuel product and the absorbent booms within the sludge container will be disposed of properly. Will need to wait until the remaining fuel residue and clean up materials are removed and properly disposed of.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Open	
24-48	5/3/2024	Direct Notification		Contractors were observed power washing the sidewalk and sign near PenFed Credit Union using a soap and bleach mixture. The cleaning mixture was found to have entered the nearby curb inlet on Gunston Road with MS4 structure ID 1629.	5/3/24: DPW personnel observed contractors washing the sign and sidewalk near the PenFed Credit Union off Gunston Road. 5/7/24: DPW-ENV Contractor Daniel Schlobach was notified of the illicit discharge. 5/9/24: DPW-ENV Contractor Daniel Schlobach performed a field investigation of the area and found no further evidence of the illicit discharge. The Fort Belvoir BMP 018 on outdoor power washing will be distributed to the contractor to ensure they are aware of the proper power washing protocols. No further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	5/10/2024
24-49	5/9/2024	Direct Notification	5505	American Water (AW) personnel were performing pot-holing at Bldg 2470 and discovered a watermain leak. AW personnel quickly responded to the leak by pumping water out of the hole and flushing hydrants to reduce water pressure. The water was dechlorinated and repairs were made the same day and the discharge did not pose a threat to stormwater quality. The dechlorinated water made its way to a storm inlet with MS4 structure ID 5505.	5/9/24: AW personnel notified DPW-ENV of the watermain leak near Bldg 2470. The water from the hydrant flushing activities occurring nearby and from the watermain leak was being dechlorinated prior to entering the storm system via storm inlet with MS4 structure ID 5505. 5/10/24: Received confirmation from AW that the watermain leak was repaired the night of 5/9. 5/23/24: DPW-ENV Contractor Daniel Schlobach performed an initial field investigation of the area and observed the area that was backfilled after the repairs were made is not sufficiently stabilized. Ensure this area is properly stabilized prior to incident closeout as this will prevent excess sediment from entering the storm system. 5/24/24: AW personnel went back to the site and stabilized the area with straw and grass seed. No further action is required.	Invaild Report/Potential Illicit Discharge/Corrective Actions Required	Closed	5/30/2024
24-50	5/17/2024	DPW Inspector	Unknown	During a routine Erosion and Sediment Control (ESC) Inspection of the National Museum of the United States Army (NMUSA) site, motor oil was observed entering the northeastern-most storm inlet (closest to the access road). A crew was present setting up a tent for a special event and it's assumed a vehicle drove over the storm inlet and a little bit of motor oil from the vehicle entered the inlet. It's estimated less than a gallon of motor oil entered the storm system.	5/17/24: DPW-ENV Contractor Daniel Schlobach observed motor oil entering a storm inlet at the NMUSA project site when performing a routine ESC inspection of the area. The site RLD and MS4PM were notified of the motor oil spill and actions were being taken to address the issue later in the day. 5/21/24: NMUSA contractor continued mitigating the motor oil spill by the storm inlet. 5/23/24: NMUSA contractor placed absorbent cover around the inlet and cleaned with cover with an EPA-approved agent. 5/24/24: DPW-ENV Contractor Daniel Schlobach performed a follow-up inspection of the area and found no more evidence of motor oil entering the storm system. No further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	5/30/2024
24-51	5/27/2024	Direct Notification	1418	AW personnel were notified at approximately 2200 on the night of 5/27/2024 regarding two water tower discharges coming from tower 1190 and tower 589. Approximately 50,000 gallons of potable water discharged from both water towers and some of the discharge from water tower 589 entered the storm system via storm inlet with MS4 structure ID 1418. The discharge from water tower 1190 did not enter the storm system as there are no nearby MS4 structures. AW personnel were able to isolate and resolve the issue within 90 minutes of the issue being reported. No environmental impacts or fish kills were observed and DEQ Pollution Report 314121 was submitted.	5/27/24: AW personnel were notified around 2200 regarding discharge coming from water towers 1190 and 589. Within 90 minutes AW was able to isolate and resolve the issue. An estimated 50,000 gallons had discharges from both water towers. DEQ Pollution Report 314121 was submitted the same day. 5/28/24: AW personnel notified DPW-ENV of the water tower discharge. 5/30/24: DPW-ENV Contractor Daniel Schlobach performed a field investigation of both water towers and the surrounding area. No evidence of the discharge remained. 5/31/24: DEQ Pollution Report 314121 was closed out and no further action is required.	Valid Report/Illicit Discharge/Corrective Actions Required	Closed	5/31/2024
24-52	5/29/2024	DPW Inspector	N/A	During a routine Erosion and Sediment Control (ESC) inspection of the Fort Belvoir North Area (FBNA) Distribution Center (DC) project site, an off-site discharge was observed at a point along the LOD where a section of super silt fence (SSF) had collapsed. It is unknown how long the discharge had been occuring and it's estimated the discharge was a result of the approximately 1.5" of rain received over the previous 48 hours. The water had pooled at a low point along the SSF and due to the pressure a small portion of SSF collapsed causing the sediment laden water to flow off-site. No photos were taken due to being in a secure area.	5/29/24: DPW-ENV Contractor Daniel Schlobach was performing a post rainfall ESC inspection of the FBNA DC construction site and observed sediment-laden runoff flowing off-site through a collapsed section of the SSF along the LOD. Site personnel were notified and a plan to dewater the area, fix the fence, and dispose of sediment outside the fence line was established. 5/30/24: ESC Inspection Report was submitted outlining the issue and what corrective actions are needed to mitigate the issue. The inspection report is attached this IDDE report for reference.	Valid Report/Illicit Discharge/Corrective Actions Required	Open	
Total	**77**					**77**	**77**	

2023

APPENDIX F

TRAINING LEVELS FROM FORT BELVOIR TRAINING PLAN, DATED APRIL 2023

FORT BELVOIR 2022-2023 MS4 ANNUAL REPORT
PERMIT NO. VAR040093

Fort Belvoir Stormwater Pollution Prevention Training Plan

3. LEVELS OF TRAINING

Table 1 outlines the Levels of Training conducted by DPW Environmental Division Stormwater Personnel. See Section 4 for training requirements for all Fort Belvoir personnel applicable to Stormwater Management. All personnel may receive Level 6 Training at any time.

Table 1. Levels of Training

Level of Training	Type of Training	Content of Training
1	ISW SWPPP	▪ Stormwater Basics ▪ Applicable Regulations ▪ ISW Basics ▪ Stormwater Impacts on Waterways ▪ SWPPP Basics ▪ Illicit Discharge Basics ▪ Applicable TMDLs ▪ Good Housekeeping & Preventative Maintenance ▪ Spill Prevention/Response ▪ Inspection Information ▪ Applicable Structural and Operational Controls ▪ Erosion & Sediment Control Basics ▪ Stormwater Sampling/Monitoring Information ▪ Required Reporting
2	MS4 SWPPP	▪ Stormwater Basics ▪ Applicable Regulations ▪ MS4 Basics ▪ Stormwater Impacts on Waterways ▪ SWPPP Basics ▪ Illicit Discharge Basics ▪ Applicable TMDLs ▪ Good Housekeeping & Preventative Maintenance ▪ Spill Prevention/Response ▪ Inspection Information ▪ Applicable Structural and Operational Controls ▪ Erosion & Sediment Control Basics ▪ Stormwater Monitoring Information ▪ Required Reporting

Fort Belvoir Stormwater Pollution Prevention Training Plan

Level of Training	Type of Training	Content of Training
3	General Stormwater Pollution Prevention	▪ Stormwater Basics ▪ Applicable Regulations ▪ Stormwater Impacts on Waterways ▪ Illicit Discharge Basics ▪ Applicable TMDLs ▪ Good Housekeeping & Preventative Maintenance ▪ Spill Prevention/Response ▪ Applicable Operational Controls ▪ Erosion & Sediment Control Basics
4	Illicit Discharge	▪ Illicit Discharge Basics ▪ Good Housekeeping & Preventative Maintenance ▪ Spill Prevention/Response ▪ Procedures for Reporting Illicit Discharges
5	Pre-Construction	▪ Stormwater Basics ▪ Applicable Regulations ▪ SWPPP Basics ▪ Erosion & Sediment Control Basics ▪ On Site Sediment and Erosion Control Requirements ▪ Materials Storage Information ▪ Illicit Discharge Basics ▪ Industrial Stormwater Outfall Information ▪ Site Closure Procedure
6	Corrective Action	▪ Stormwater Basics ▪ Applicable Regulations ▪ Stormwater Impacts on Waterways ▪ Illicit Discharge Basics ▪ Good Housekeeping & Preventative Maintenance ▪ Spill Prevention/Response ▪ Applicable BMPs ▪ Erosion & Sediment Control Basics ▪ Corrections to specific reported unauthorized action(s)
7	Chloride TMDL	▪ Stormwater Basics ▪ Chloride TMDL Basics ▪ Impacts on drinking water ▪ Applicable BMPs ▪ Salt Tracking and Data Sheets