



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

REPLY TO
ATTENTION OF

SEP 29 2014

Directorate of Public Works

Mr. Bryant Thomas, Water Permits Manager
DEQ Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Dear Mr. Thomas,

Enclosed is the Annual Report for the Fort Belvoir MS4 Permit (Permit #VAR040093) for the reporting period July 1, 2013 – June 30, 2014 and the revised MS4 Program Plan.

“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.”

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

Sincerely,


Bill Sanders
Director

Enclosures

“LEADERS IN EXCELLENCE”

**VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VDPES)
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4) PERMIT
FORT BELVOIR ANNUAL REPORT
JULY 1, 2013 – JUNE 30, 2014**

Information provided in this annual report is required as outlined in 9VAC25-890-40, Section II, E.3.a.-h. "Annual Reports".

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

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

US Army, Fort Belvoir, Virginia

MS4 Permit Number VAR040093

(2) Annual Report Year: July 1, 2013 – June 30, 2014

(3) Modifications to any operator's department's roles and responsibilities: NONE

(4) Number of new MS4 outfalls and associated acreage by HUC added during the permit year:

During the reporting period of July 1, 2013 – June 30, 2014, there were no new outfalls added to the MS4.

(5) Signed Certification: Certification statement is incorporated in the transmittal letter for this report.

b. The status of compliance with state permit conditions, an assessment of appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures (9VAC25-890-40, E.3.b). This section will identify status of MS4 program plan updates required in this permit (9VAC25-890-40), an assessment of the appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures.

(1) Status of MS4 Program Plan Updates Required

Table 1 identifies the schedule for MS4 Program Plan updates that are required in this permit. The revised MS4 Program Plan may be found in Appendix A.

Table 1. Schedule of MS4 Program Plan Updates Required in This Permit

Program Update Required	Permit Reference	Update To Be Completed By	Status
Public Education Outreach Plan (Minimum Control Measure 1 – Public Education and Outreach on Stormwater Impacts)	Section II B 1	12 months after permit coverage	Funding was received in February 2014 for plan development and a contract was awarded in June 2014 to complete the plan. Plan development is ongoing.

Table 1. Schedule of MS4 Program Plan Updates Required in This Permit

Program Update Required	Permit Reference	Update To Be Completed By	Status
Illicit Discharges Procedures – (Minimum Control Measure 3 – Illicit Discharge Detection and Elimination)	Section II B 3	12 months after permit coverage	Funding was received in February 2014 for Illicit Discharge Detection and Elimination Plan development and a contract was awarded in June 2014 to complete a plan which will include procedures. Plan development is ongoing.
Individual Residential Lot Special Criteria (Minimum Control Measure 5 – Post Construction Stormwater Management in New Development and Development on Prior Developed Lands)	Section II B 5 c (1) (d)	12 months after permit coverage	This program update is not applicable. Housing areas are owned by Fort Belvoir and leased by a private entity (The Michaels Organization). Stormwater facility maintenance inspections are conducted by Fort Belvoir personnel and deficiencies are provided to the private entity and maintenance is conducted by the private entity. The <i>General Plan for Stormwater Management Facility Inspection and Maintenance</i> that was updated in June 2014 is the basis for all inspections and maintenance.
Operator-Owned Stormwater Management Inspection Procedures (Minimum Control Measure 5 – Post – Construction Stormwater Management in New Development and Development on Prior Developed Lands)	Section II B 5	12 months after permit coverage	A <i>General Plan for Stormwater Management Facility Inspection and Maintenance</i> was completed in September 2013 and updated in June 30, 2014. This plan documents inspection procedures.
Identification of Locations Requiring SWPPPs (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 b	12 months after permit coverage	Funding was received in February 2014 and contract was awarded in August 2014 for the SWPPP development. See BMP 6.8 for status on identification of locations requiring SWPPPs.
Nutrient Management Plan (NMP) Locations – (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 c (1) (a)	12 months after permit coverage	A Nutrient Management Plan for the Fort Belvoir Golf Course was completed in March 2013. Locations have been identified that require additional nutrient management plans. See BMP 6.7 for status on identification of locations.
Training Schedule and Program –	Section II B 6	12 months after	An Illicit Discharge Training Module

Table 1. Schedule of MS4 Program Plan Updates Required in This Permit

Program Update Required	Permit Reference	Update To Be Completed By	Status
(Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)		permit coverage	was completed in June 2014 and a training schedule will be developed and implemented in permit year 2 (2014 – 2015).
Updated TMDL Action Plans (TMDLs approved before July 2008) – Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other than Chesapeake Bay)	Section I B	24 months after permit coverage	PCB TMDL Action Plan was completed in March 2013.
Chesapeake Bay TMDL Action Plan – (Special Condition for Chesapeake Bay TMDL)	Section I C	24 months after permit coverage	Contract has been awarded by Army Headquarters to U.S. Army Corps of Engineers. The Chesapeake Bay TMDL Action Plan is being developed and is scheduled to be completed in June 2015.
Stormwater Management Progressive Compliance and Enforcement – (Minimum Control Measure 4 – Construction Site Stormwater Runoff Control)	Section II B 5	24 months after permit coverage	Planned for 1 July 2014 – 30 June 2015.
Daily Good Housekeeping Procedures (Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 a	24 months after permit coverage	Planned for 1 July 2014 – 30 June 2015.
Other TMDL Action Plans for applicable TMDLs approved between July 2008 and June 2013 – (Special Conditions for Approved Total Maximum Daily Loads (TMDL) Other Than Chesapeake Bay)	Section I B	36 months after permit coverage	Planned for 1 July 2015 – 30 June 2016.
Outfall Map Completed – Minimum Control Measure 3 – Illicit Discharge Detection and Elimination) – Applicable to new boundaries identified as “urbanized” areas in the 2010 Decennial Census	Section II B 3 a (3)	48 months after permit coverage	Funding was received in February 2014 for Illicit Discharge Detection and Elimination Plan development and a contract was awarded in June 2014 to complete a plan. As part of the plan, the outfall map will continue to be updated.
SWPPP Implementation – (Minimum	Section II B 6 b (3)	48 months after	Planned for 1 July 2016 – 30 June

Table 1. Schedule of MS4 Program Plan Updates Required in This Permit

Program Update Required	Permit Reference	Update To Be Completed By	Status
Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)		permit coverage	2017
NMP Implementation - Minimum Control Measure 6 – Pollution Prevention/Good Housekeeping for Municipal Operations)	Section II B 6 c (1) (b)	60 months after permit coverage	The Nutrient Management Plan for Fort Belvoir Golf Course was implemented in 2013. Additional Nutrient Management Plans are scheduled to be implemented during 2015 – 2017.

- (2) Assessment of appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures.** Individual status summaries for Best Management Practices (BMPs) for each of the six Minimum Control Measures (MCM) that are identified in the MS4 Program plan are provided below. Where noted, supplemental supporting information is provided in appendices.

MCM#1 Public Education and Outreach on Stormwater Impacts

BMP 1.1 Support Accotink Bay Wildlife Refuge Environmental Education Center

- **Measurable Goal:** Support one activity per year, in permit years 1 – 5 to educate children attending Fort Belvoir Elementary School about the effects of stormwater discharge on water quality.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014 by conducting one activity as follows:

On April 17, 2014, as part of the Earth Day events at the Accotink Bay Wildlife Refuge Environmental Education Center, there was an interactive display erected with handouts regarding stormwater discharges and pollutants. The handout was from EPA and entitled, “After the Storm: A Citizens Guide to Understanding Stormwater” (EPA 833-B-03-002, January 2003). Over 200 handouts were distributed to residents of Fort Belvoir. Additionally, this display demonstrated the effects of everyday activities on water quality and was staffed through the entire day’s celebration and activities.

On May 3, 2014, twenty teens of National Guard Reserve families visited the Environmental Education Center as part of a Teen Leadership Weekend. Two DPW ENRD staff members presented general information on watershed management and specific information on how daily activities impact water quality.

BMP 1.2 Present Stormwater and Watershed Information on the Fort Belvoir website

- **Measurable Goal:** In permit year 1, revise information presented regarding impacts of stormwater discharge to receiving waters and general watershed data on the Fort Belvoir DPW ENRD website (<http://www.belvoir.army.mil/dpw/enrd/enrdMain.asp>), a sub-site of the main Fort Belvoir website. In permit years 2 – 5, review and revise, as needed, annually.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In May 2012, work began to extensively update an existing Fort Belvoir DPW ENRD website (<http://www.belvoir.army.mil/dpw/enrd/enrdMain.asp>) which will present stormwater and general watershed information. Content for the draft website was completed in May 2014 and is currently under review by Fort Belvoir leadership for approval and launch. This website will contain information on general watershed information, impacts of illicit discharges and what contractors, government employees and military personnel can do to help reduce water quality impacts.

BMP 1.3 Present Information on Watershed Protection to School Groups

- **Measurable Goal:** In permit years 1 – 5, attend Fort Belvoir Elementary School's Annual Career Day. Set up displays and make presentations regarding protection of the Chesapeake Bay watershed.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. On November 1, 2013, three staff members from Fort Belvoir Directorate of Public Works (DPW), Environmental and Natural Resource Division (ENRD) attended Career Day at the Fort Belvoir Elementary School. One staff member specifically discussed stormwater careers and what the children can do to improve stormwater quality and how their daily actions can impact the water quality of adjacent waterways like the Potomac River and ultimately, the Chesapeake Bay. Copies of stormwater educational materials were on display and included the U.S. EPA brochure entitled, "After the Storm: A Citizens Guide to Understanding Stormwater" (EPA 833-B-03-002, January 2003) and "Are You

Cleaning Up After Your Pet?”. Over 150 students attended and approximately 50 copies of the brochure were distributed and discussed. A copy of the brochure “Are You Cleaning Up After Your Pet?” is provided in Appendix B.

BMP 1.4 Develop and Implement A Public Outreach Plan

- **Measureable Goal:** In permit year 1, develop a Public Outreach Plan in accordance with the conditions set forth in 9VAC25-890-40 Section II B. 1. In permit years 2 – 5, annually conduct sufficient education and outreach activities designed to reach an equivalent of 20% of each high-priority issue target audience.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Funding was received in February 2014 for plan development and a contract was awarded in June 2014 to complete plan. Plan development is ongoing and education and outreach activities will be implemented in permit years 2 – 5.

MCM#2 Public Involvement/Participation

BMP 2.1 Public Participation

- **Measureable Goal:** In permit years 1 – 5, participate, through promotion, sponsorship or other involvement, in a minimum of four local activities annually. Examples of possible activities include: Potomac River Cleanup, Richmond Highway (Route 1) Cleanup, community service projects with scout groups, hazardous waste cleanup days, etc. Involve tenant agencies, schools, community partners and other members of the public with the goal of increasing public participation to reduce stormwater pollutant loads, improve water quality and support local restoration and clean-up projects, programs groups, meetings or other opportunities for public involvement.
- **Status Update:** Fort Belvoir did not meet this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir supported two events during the reporting period.

The Potomac River Watershed Cleanup Day was held on April 5, 2014. Approximately 200 volunteers from a number of organizations participated in the Cleanup which yielded 60 tires, 5 50-gallon drums, 500 pounds of scrap metal and about 150 bags of plastic, glass and metal. Volunteers came from the Society of American Military Engineers, Boy Scouts, Girl Scouts, Belvoir Waterfowl Hunters, Belvoir Bow Hunters, Fort Belvoir Community Residents and

Fort Belvoir's DPW and MWR. A copy of the article, "Watershed Cleanup Sets Trash Collection Record", printed in the April 10, 2014 Belvoir Eagle is provided in Appendix B.

The Route 1 (Richmond Highway) Clean-up was held on April 26, 2014. Approximately 50 volunteers participated in cleaning up the Route 1 corridor through Belvoir. Route 1 is a major roadway that runs through the Fort Belvoir property and much of the stormwater from the roadway discharges into local streams including Accotink Creek. A copy of the article "Service Members Support Local Community at Route 1 Cleanup", printed on the May 1, 2014 U.S. Army website (www.army.mil) is provided in Appendix B.

For permit year 2 (July 1, 2014 – June 30, 2015), Fort Belvoir DPW-ENRD will be hosting a new cleanup event in support of the 29th Annual International Coastal Cleanup as part of National Public Lands Day on Saturday, September 27, 2014. Other local activities are being researched to include storm drain stenciling project, hazardous waste cleanup days and an additional cleanup event. This additional research effort will result in meeting the goal of four local activities annually in permit year 2 (2014 – 2015).

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

- **Measurable Goal:** Update the MS4 Program Plan at a minimum once per year and in conjunction with the annual report. Post copies of the MS4 Program Plan on the Fort Belvoir webpage at a minimum of once a year and within 30 days of submittal of the annual report to the Virginia Department of Environmental Quality (VADEQ). Post copies of each annual report on the Fort Belvoir webpage within 30 days of submittal to VADEQ and retain copies of annual reports online for the duration of the MS4 permit.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. The MS4 Program Plan was updated in September 2013. Copies of the updated MS4 Program Plan and this annual report were posted on the Fort Belvoir website <https://www.belvoir.army.mil/envirodocssection.asp> by October 30, 2013. Copies of this annual report and a revised MS4 Program Plan will be posted on the Fort Belvoir website by October 30, 2014.

BMP 2.3 Provide for Public Notification and Receipt of Comments on the MS4 Program Plan

- **Measurable Goal:** In permit year 5, prior to submittal of the registration statement, provide for a public notification of a 30-day review and comment period of the MS4 Program Plan which may include a notice in the *Belvoir Eagle*

and/or posting the notice on the Fort Belvoir Facebook site and/or posting of the notice on the Fort Belvoir website.

- Status Update: Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir plans to provide a formal review and comment period of the MS4 Program Plan in February 2018. Informal comments are welcomed throughout the permit cycle.

MCM#3 Illicit Discharge Detection and Elimination

BMP 3.1 Develop, Implement, Update and Support Geospatial Information System (GIS) Layers

- Measurable Goal: In permit year 1, review existing GIS data layers to determine if existing layers need to be updated and identify additional data layers needed, if any. In permit years 2 -5, develop, implement, update and support GIS data layers containing stormwater systems (to include outfalls and stormwater management facilities), watershed/subwatershed boundaries, utility data and other information pertinent to stormwater management to reflect changes or new information.
- Status Update: Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Work continued to identify outfalls in the existing stormwater facility database and update the GIS data layer to include new outfalls. This work is currently ongoing.

BMP 3.2 Develop Methods to Detect Illicit Discharges

- Measurable Goal: Develop standardized procedures and processes to perform evaluations of various facility or installation operations, such as smoke or dye tests of drains, in order to identify illicit discharges.
- Status Update: Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In February 2014, funding was received for development of an Illicit Discharge Detection and Elimination Plan which will include procedures for conducting illicit discharge detection. Contract was awarded in June 2014 and plan development is ongoing.

BMP 3.3 Inform the Public of Water Quality Impacts Associated with Illicit Discharges

- Measurable Goal: In permit years 1 – 5, provide information to the Fort Belvoir public on the identification and water quality effect of illicit discharges.

- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. As part of the ongoing extensive update to an existing DPW ENRD website, information has been drafted that will be presented to the public on the Fort Belvoir website about the effect of illicit discharges on water quality. In addition, an Illicit Discharge Training Module was completed in June 2014 for use in permit year 2 to provide information to the Fort Belvoir public.

BMP 3.4 Evaluate Storm Drain Outfalls

- **Measurable Goal:** In permit years 1 – 5, perform an outfall reconnaissance inventory of 50 identified outfalls to detect illicit discharges utilizing methodology noted in the U.S. Environmental Protection Agency's *Illicit Discharge Detection and Elimination Guidance Manual* dated October 2004.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In February 2014, funding was received and a contract was awarded in June 2014 for development of an Illicit Discharge Detection and Elimination Plan. This plan will include procedures on how to conduct dry weather screening of outfalls. This contract also includes an outfall reconnaissance inventory (dry weather screening) of 50 outfalls annually from the time period July 1, 2014 to June 30, 2019.

Inspections on 241 post-construction stormwater management facilities were conducted between January 25, 2014 and April 27, 2014. While these inspections were primarily to identify maintenance requirements for each facility, outfalls for each facility were also inspected and the inspections included incidental visual observations of water quality of flowing water from the outfall. This data is currently being reviewed to identify outfalls of high potential for illicit discharge which will be included in the first 50 outfalls that will be inventoried under the Illicit Discharge Detection and Elimination Plan.

In addition, during the biweekly erosion and sediment control (ESC) inspections, ESC inspectors conducted a visual inspection for any illicit discharges at the construction site and notified the construction contractors of any improper storage of construction materials (to include petroleum products on construction sites).

BMP 3.5 Perform Illicit Discharge Detection and Mitigation Procedures

- **Measurable Goal:** In permit years 2 – 5, perform previously developed illicit discharge detection procedures (BMP 3.1) at five installation facilities with the potential for illicit discharge and develop recommendations for potential mitigation actions.

- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In permit years 2 – 5, Fort Belvoir is planning to implement procedures at five facilities with the potential for illicit discharge and develop recommendations for potential mitigation actions.

BMP 3.6 Develop a Plan for Operations That May Affect Stormwater

- **Measurable Goal:** In permit year 1, develop an assessment plan to identify and evaluate other routine operations such as waterline flushing, golf course irrigation, basement drains and condensate drains which may have an impact on stormwater quality.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. The privatized waste-water/water partner (American Water) has established procedures when conducting fire hydrant flushing which incorporates the use of a diffuser cone with de-chlorination table feeder (bisulfate tablets). American Water staff also utilizes de-chlorination mats to cover large large stormwater grates during hydrant flushing. These mats are also utilized during in the event of a large drinking waterline break to protect streams.

In February 2014, funding was received and a contract was awarded in June 2014 for development of an Illicit Discharge Detection and Elimination Plan. This plan will include procedures for investigating illicit discharges discovered during the dry weather screening of outfalls.

Nutrient Management Plans are being developed to address fertilizer activities. See BMP 6.7 for additional information.

BMP 3.7 Perform Routine Operation Assessments and Develop BMPs

- **Measureable Goal:** By the end of permit year 4, implement the assessment plan (developed for BMP 3.6) to identify potential impacts to stormwater quality from various routine operations. Develop BMPs or engineering controls to address identified non-stormwater discharges. Incorporate engineering controls or implement BMPs to address identified non-stormwater discharges that impact stormwater quality. In permit year 5, perform inspections and necessary maintenance on engineering controls or BMPs to ensure functionality.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir is planning to implement the assessment plan in permit year 4.

BMP 3.8 Evaluate Potential Combined Sewer Overflow Connections

- **Measurable Goal:** Conduct and/or evaluate studies of potential combined sewer overflow connections and develop recommendations and/or mitigation actions.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. The privatized waste-water/water partner, American Water, is not aware of any connections of the sanitary sewer to the storm sewer system. However, should a connection be found, funding will be requested to evaluate and correct cross connections. In addition, smoke testing is planned in 2014 – 2015 to investigate the possibility of roof drains being connected to the sanitary sewer in Area 300.

Additionally, funding was received and provided to U.S. Army Corps of Engineers for a stormwater management study in the Fort Belvoir Historic District (Area 200). This study is designed to investigate the possibility of roof drains being connected to the sanitary sewer and includes a general review of the potential Low Impact Development (LID) opportunities in order to meet EISA 438 requirements and to assist towards the water quality goals set by the Chesapeake Bay TMDL and the MS4 Permit.

BMP 3.9 Evaluate Stormwater Sampling

- **Measureable Goal:** Evaluate the stormwater system for the potential development of a sampling strategy and, if appropriate, develop a detailed sampling plan and perform sampling in accordance with plan (as needed).
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In February 2014, funding was received and a contract was awarded in June 2014 for development of an Illicit Discharge Detection and Elimination Plan. This plan will include a description of when sampling may be required when an illicit discharge is discovered.

BMP 3.10 Develop and Provide an Integrated Annual Training Program

- **Measurable Goals:** In permit years 1 – 5, conduct annual training for military and civilian staff, Fort Belvoir operations and maintenance contractors, Fort Belvoir partnering contractors and Fort Belvoir specialized contractors performing related industrial practices to increase awareness of the implications of illicit discharges and improper waste disposal to water quality.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. As part of the permit conditions for the VPDES General Permit VAR051080 for Industrial Stormwater Discharges at Davison Army Airfield, the annual training on the Stormwater Pollution Prevention Plan (SWPPP) was conducted by DPW ENRD staff on October 29, 2013. Eighteen people attended

the training. This training consisted of staff awareness of potential contamination from airfield operations to the stormwater system, BMPs and illicit discharge elimination. This training has integrated information on general stormwater quality protection and there is an open invitation to all of Fort Belvoir personnel including tenant activities and the fire department.

In addition, the development of the Illicit Discharge Training Module was completed in July 2014 and will be utilized in permit years 2 – 5 to conduct annual training. As previously reported, this training was to be posted on the DPW ENRD website. However, the DPW ENRD website content is under review by management and the training module has not been posted. Training will be provided in a classroom setting until the module can be incorporated onto the website.

During the pre-construction Erosion & Sediment Control inspections, inspectors provide construction contractors with a copy of EPA's factsheet "*Stormwater Best Management Practice Concrete Washout*" to educate them on the proper management/disposal of concrete washout water and one-on-one education is provided during inspections on proper construction material storage (ie. fuel cans, hydraulic fluid, oil, Quickrete) and equipment fueling procedures.

BMP 3.11 Support Family Housing Orientation

- **Measurable Goals:** In permit years 1 – 5, develop and distribute materials to new housing residents.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Stormwater quality flyers on Pet Waste, Automobile Maintenance and Car Care Tips for Homeowners and Lawn Care, Fertilizer and Pollution provided in "The Villages at Fort Belvoir Resident Responsibility Guide" found at http://www.villagesatbelvoir.com/wp-content/uploads/RRG_Temporary-Transition_Rev081413_JW_Final-for-Web.pdf.

This Guide is distributed to all housing residents at Fort Belvoir. Copies of the flyers are provided in Appendix C.

BMP 3.12 Implement Fort Belvoir Pollution Complaint "Hot Line"

- **Measureable Goal:** In permit year 1, develop a consolidated list of various avenues used for the public to raise a question or concern about environmental protection and publish on the DPW ENRD website and/or in the *Belvoir Eagle*. In permit years 2 – 5, monitor concerns and provide responses to individuals raising questions or concerns.

- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Avenues that may be utilized by anyone to raise a question or complaint regarding environmental protection include: Maintenance of a Garrison Staff Directory with the Commander's Hotline phone number and email address, maintenance of a Fort Belvoir Quick Telephone Directory on the Fort Belvoir website <https://www.belvoir.army.mil/BOS.asp> and maintenance and monitoring of Fort Belvoir's Facebook site (This site is monitored by a DPQ ENRD staff person twice a day for comments posted that would be of environmental concern.) There were no reported concerns via this media during this reporting period.

MCM#4 Construction Site Stormwater Runoff Control

BMP 4.1 Establish a Construction Project Review Procedure

- **Measurable Goal:** Establish a procedure to review construction projects to evaluate the project's potential to impact water quality, and the project's compliance with the MS4 Permit and state and federal regulations. Procedure includes: requiring the signature of a licensed Virginia Professional Engineer attesting that the construction plans and design documents were prepared in accordance with the MS4 Permit and have incorporated the minimum standards of the Virginia Erosion and Sediment Control Handbook (VESCH), Virginia Stormwater Management Handbook (VSWH) and Fairfax County Public Facilities Manual (FCPFM) and the Virginia Erosion and Sediment Control and Stormwater Management Regulations. Copies of design analyses, design plans and erosion and sediment control plans will be routed to Virginia-certified staff at Fort Belvoir for review. Each iteration in the design process must maintain the minimum standards of the VESCH, VSWH, and FCPFM and state and federal (Energy Independence and Security Act, Section 438 (EISA 438)) regulations and is subject to additional review and deficient or non-compliant documents will be returned to designers for modification and resubmission. Review 100% of construction requirements 2500 square feet or greater.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir MS4 staff maintained Virginia certificates of competence for Combined Administrators (Erosion and Sediment Control (ESC) or ESC Inspectors or are licensed as a professional engineer, architect, certified landscape architect or land surveyor in accordance with the certification requirements administered by the Virginia Department of Environmental Quality (9VAC25-870).

MS4 staff reviewed construction plans for projects disturbing areas of 2,500 square feet and greater to determine if the design plans are in compliance with the VESCH, FCPFM, VSMH, EISA 438 and Virginia Erosion and Sediment Control and Stormwater Management laws and regulations.

BMP 4.2 Communicate the Requirements of the Stormwater Program

- **Measurable Goal:** Distribute MS4 permit requirements to designers during initial planning phases of construction projects. All construction contract packages (including designs and specifications) shall incorporate a requirement to conform to the conditions of the MS4 Permit and Program Plan.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir reviewed and revised the Bulletin entitled “Stormwater Design, Review and Plan Approval Procedures and Erosion and Sediment Control (ESC) Compliance Procedures During Construction” which was provided to A/E firms producing construction plans and documents that detailed requirements for the design and implementation of stormwater and erosion and sediment control measures as well as construction contractors. For all projects where initial planning is done locally, ENRD provided guidance to the project proponent regarding MS4 Permit compliance requirements. A copy of the Bulletin is provided in Appendix D.

Upon request, DPW ENRD provided the Fort Belvoir Home Page website address for copies of the MS4 General Permit and Fort Belvoir’s Registration Statement, as well as the URL address for Virginia Code for direct access to the MS4 General Permit, the Virginia Stormwater and Erosion & Sediment Control Regulations and other documents that may be of interest (i.e EISA 438).

MS4 permit compliance design requirements were incorporated into the Final Draft Installation Planning Standards in March 2014 and the document is scheduled for finalization in Fall 2015. The portion of the Installation Planning Standards pertaining to stormwater design will then be published on the Fort Belvoir DPW ENRD website once the document is final.

BMP 4.3 Develop a Tracking System

- **Measurable Goal:** Establish a tracking system to ensure review comments are adequately addressed; include number and acreage of disturbed land. Develop in conjunction with National and Environmental Policy Act (NEPA) and Environmental Management System (EMS) regulation and policies.

- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir ENRD maintained an Excel Spreadsheet for Project Status which tracks the date that plans were approved, when the land disturbance letter was issued, the construction start date, construction end date, area of disturbance (acres), the plan reviewer and inspector for the project and the project status (ie what stage in the design/construction process the project is in). The Project Status spreadsheet was updated biannually. (See Appendix C for Project Status spreadsheet.)

BMP 4.4 Obtain Registration under Virginia Stormwater Management Permit (VSMP) for Construction Projects

- **Measurable Goal:** Construction projects that disturb more than 2,500 square feet of land must obtain permit registration under the general VSMP permit for construction projects and must adhere to the requirements of the permit. Incorporate a procedure under the utility clearance permit process to determine construction-VSMP applicability and verify existence of required erosion control plans prior to utility clearance permit approval.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir required all projects disturbing 2,500 square feet or more of land surface to obtain registration under the general Virginia Stormwater Management Program (VSMP) Permit through the Virginia Department of Environmental Quality. DPW ENRD staff required the contractors to provide a copy of the VSMP Registration Statement submitted to the VADCR along with a copy of the check used to pay the fee before the Land Disturbance Letter could be signed authorizing commencement of the construction project. See Appendix C for Project Status spreadsheet which also contains the VSMP Permit Numbers for each project.

BMP 4.5 Initiate Periodic Site Inspections

- **Measurable Goal:** Establish periodic inspection procedures to determine adherence to the approved design plan and the construction VSMP permit (as applicable) and to evaluate performance of BMPs and/or engineering controls. Require site inspectors to be Virginia Certified Erosion and Sediment Control Inspectors. Any deficiencies identified during inspection shall be rectified immediately. In the event that the same deficiency is noted during re-inspections an immediate report shall be filed with the Virginia Department of Environmental Quality and site operations shall cease until the deficiency is corrected. Perform site inspections of 100% construction projects.

- **Status Update:** Fort Belvoir did not meet this goal for the reporting period July 1, 2013 – June 30, 2014. Erosion and Sediment Control inspections were conducted once every two weeks and within 48 hours of a storm event that produced greater than .5" precipitation on all construction projects possessing a VSMP permit for all projects. However, staff shortages due to contractual lapses and absences of government staff due to furloughs and extended medical leave resulted in completion of approximately 95% of required inspections. A total of 456 Erosion and Sediment Control inspections were conducted.

DPW ENRD inspectors worked with contracting representatives and contractors to correct any deficiencies that were noted. Historically construction site dewatering has been a deficiency noted on construction sites. The technical bulletin was reviewed and there were no revisions for this reporting cycle. This technical bulletin was distributed to construction contractors. (See Appendix C for blank inspection report and dewatering technical bulletin.)

BMP 4.6 Evaluate Emerging Technologies

- **Measurable Goal:** Review or evaluate one new product or engineering control designed to reduce soil erosion, consider possibility of use and potential effectiveness.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Two DPW ENRD staff attended StormCon 2013, August 18 – 22, 2013 to review new technology designed to reduce soil erosion that was presented by vendors. Specifically, data was obtained on the use of biodegradable turf reinforcement mats, Thirsty Duck flow control technology and modular wetlands.

One DPW ENRD staff attended U.S. Army Corps of Engineers Low Impact Development Training April 8 – 10, 2014. This training provided an overview of EISA 438, the Army LID Technical User Guide, integration of LID design and LID challenges.

Additionally, funding was received and provided to U.S. Army Corps of Engineers for a stormwater management study in the Fort Belvoir Historic District (Area 200). This study includes a general review of the potential Low Impact Development (LID) opportunities in order to meet EISA 438 requirements and to assist towards the water quality goals set by the Chesapeake Bay TMDL and the MS4 Permit.

MCM#5 Post-Construction Stormwater Management in New Development

BMP 5.1 Establish a Construction Project Review Procedures

- **Measurable Goal:** All construction contract packages (including designs and specifications) shall incorporate a requirement to conform to the conditions of the MS4 permit and state and federal regulations. Establish a procedure to review projects to evaluate proposed structural and non-structural BMPs and project compliance with MS4 and the Stormwater Management Plan. Procedure will include: requiring signature of a licensed Virginia Professional Engineer attesting that the project was prepared in accordance with the MS4 Permit and incorporates the minimum standards of the VESCH, VSWH and FCPFM and the Virginia Erosion and Sediment Control and Stormwater Management regulations. Copies of stormwater design analyses, design plans and information regarding stormwater control structures will be routed to Virginia-certified staff at Fort Belvoir for review. Each iteration of the design process must maintain the minimum standards of the VESCH, VSWH, and FCPFM and state regulations and is subject to additional review. Deficient designs or noncompliant project documents will be returned to designers for modification and resubmission.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. MS4 staff reviewed construction plans for projects disturbing areas of 2,500 square feet and greater to determine if the design plans are in compliance with the VESCH, FCPFM, VSMH, EISA 438 and Virginia Erosion and Sediment Control and Stormwater Management laws and regulations. A Land Disturbance Letter authorizing commencement of construction was issued once Erosion and Sediment Control and Stormwater Management Plans were approved by the Director of Public Works.

BMP 5.2 Develop a Stormwater Management Facility Tracking System.

- **Measurable Goal:** Establish a tracking system to include information regarding the type of facility/BMP, the latitude and longitude, the total number of acres treated by the facility/BMP to include a breakdown of pervious and impervious acres, the date the facility/BMP was brought online, the sixth order hydrologic unit (HUC) code, the name of any impaired water segments within each HUC listed and inspection and maintenance dates/information.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. An Access database was revised to track stormwater management facilities /BMPs inventory and provide documentation of inspections and maintenance for each facility/BMP. No new stormwater management facilities/BMPs were brought online during the reporting period.

BMP 5.3 Initiate Periodic Site Inspections

- **Measurable Goal:** Establish periodic inspection procedures to determine adherence to the approved design plans and to observe status of the stormwater management facility/BMP. Establish periodic inspection procedures to determine adherence to the approved design plans and to evaluate performances of BMPs and/or engineering controls. In permit years 1 and 2, Fort Belvoir staff will complete training required for Virginia Certified Stormwater Inspectors. Perform site inspections of 100% of active construction projects and 10% of post-construction projects (annually).
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. No construction projects were completed this year. Therefore, there were no permanent stormwater management facilities that required inspections.

Three DPW ENRD personnel attended the VADEQ Stormwater Management Inspector Course that was conducted on May 21, 2014^h at the Herrity Learning Center, Fairfax County Government Center in Fairfax.

BMP 5.4 Provide Information on the Fort Belvoir DPW ENRD website on Low Impact Development (LID)

- **Measurable Goal:** Develop and maintain information on Low Impact Development on the Fort Belvoir DPW ENRD website that focuses on designing for low impact and sustainable development.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In May 2012, work began to extensively update an existing Fort Belvoir DPW ENRD website (<http://www.belvoir.army.mil/dpw/enrd/enrdMain.asp>) which will present stormwater and general watershed information and will include information on Low Impact Development. Content for the draft website was completed in May 2014 and is currently in review by upper management for approval and launch.

BMP 5.5 Audits of Existing Stream Conditions

- **Measurable Goal:** Perform an audit of the existing conditions of stream channels and banks, outfalls, etc. to include a visual inspection and collection of photographic documentation to allow visual comparisons of existing and future conditions.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. In June 2013, DPW ENRD staff contracted to perform a visual

inspection with photographic documentation for five streams that were located within the Accotink Creek Watershed and Dogue Creek Watershed. In addition to the visual inspection and photographic documentation, the Bank Assessment for Non-point source Consequences of Sediment (BANCS) method was used to quantitatively predict stream bank erosion rates for each study stream. BANCS was completed in order to calculate contributions of sediment and nutrients for each particular stream system. This approach was implemented to allow for the possibility of Fort Belvoir to utilize stream restoration as an acceptable means and methods to achieve required load reductions of nutrients and sediments as required by the Chesapeake Bay TMDL. The stream audit was completed in September 2013 and a final report was provided in December 2013.

BMP 5.6 Corrections to Existing Watersheds

- **Measureable Goal:** Systematically correct watershed damages caused by existing conditions, poor design of control structures, or inadequate maintenance of control structures. Program and implement an investment program where 10% of identified requirements are executed each year.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. DPW ENRD requested and received funds for one stream restoration and three stream stabilization projects using natural stream design. A contract was awarded in August 2014 for the stream restoration and the three stream stabilization projects are programmed for the next permit year (2015).

In addition, a *Stormwater Management Facility Corrective Action Plan* was completed in on June 24, 2014 which identifies needed maintenance on stormwater management facilities. This report will be utilized to prioritize maintenance projects and request funding in 2015.

BMP 5.7 Implement Periodic Inspections and Clean Out of Storm Drains

- **Measureable Goal:** Develop inspection and maintenance standards for cleaning of storm drains (curb inlets, yard inlets, storm pipes and concrete ditches) and disposal of collected waste material. Evaluate 25% of the maintenance activities for effectiveness.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. DPW ENRD staff evaluated storm drain maintenance activities and revised sections of the Performance Work Statement in the Base Operations Contract to “Perform Rooting and Flushing of Storm Drainage System” and to “Perform Catch Basin and Storm Drain Cleaning”. The revised requirement to collect waste material from all storm drain flushing and catch basin cleaning

operations and to perform analytical testing of collected waste materials for hazardous waste determination prior to disposal of materials will meet the Minimum Measure for Pollution Prevention/Good Housekeeping for Municipal Operations found in EPA NPDES Fact Sheet, "Storm Drain System Cleaning" dated July 23, 2012.

BMP 5.8 Ensure Functionality of Existing Storm Water Management Structures

- **Measureable Goal:** Develop an inspection and maintenance plan to ensure functionality of existing stormwater best management practices (BMPs) to include: detention, retention, bioretention, filtration, infiltration and manufactured treatment devices using inspection schedules to identify routine, preventative and special maintenance requirements. Inspect 20% of stormwater BMPs annually to ensure they are functioning as designed.
- **Status Update:** Fort Belvoir exceeded this goal for the reporting period July 1, 2013 – June 30, 2014. A *General Plan for Stormwater Management Facility Inspection and Maintenance* was completed in September 2013 and revised on June 30, 2014. This plan specifies the types of stormwater management facilities found at Fort Belvoir and identifies required maintenance and frequency for each type of facility.

Additionally, baseline inspections were conducted for 234 out of 241 BMPs to document functionality and need for maintenance activities. These efforts were documented in the *Stormwater Management Facility Corrective Action Plan* dated June 24, 2014.

The *General Plan for Stormwater Management Facility Inspection and Maintenance* and the *Stormwater Management Facility Corrective Action Plan* may be found in Appendix D.

MCM#6 Pollution Prevention/Good Housekeeping for Municipal Operations

BMP 6.1 Develop and Implement a Written Training Plan

- **Measurable Goal:** In permit year 2, develop a written training plan in accordance with 9VAC25-890-40 Section II B.6.d. In permit years 3 – 5, implement the training plan for installation staff, support contractors and tenant commands.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. The Illicit Discharge Training Module was completed in June 2014 which included Operations and Maintenance Training. This Module will be incorporate when developing a written training plan in permit year 2.

BMP 6.2 Support Recycling and HAZMAT Programs

- **Measurable Goal:** Provide relevant information about recycling and HAZMAT programs to the public through monthly periodicals such as the *Belvoir Eagle* or the Fort Belvoir website.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir's household hazardous waste (HHW) program is managed by a privatized family housing contractor (The Michaels Organization) that is responsible for the collection of HHW and proper disposal. All industrial hazardous waste generated by garrison tenants (non-family housing residence) is removed utilizing services contracted by Defense Logistics Agency for proper disposal. DPW ENRD staff is currently reviewing the family housing household hazardous waste program to evaluate how to improve coordination between the housing contractor and the Fort Belvoir recycling center.

Copies of recycling information that was incorporated into “The Villages at Fort Belvoir Resident Responsibility Guide” and the Fort Belvoir Policy Memorandum #30, Fort Belvoir Qualified Recycling Program are provided in Appendix E.

BMP 6.3 Support Street Sweeping Activities

- **Measurable Goal:** Develop street sweeping operations and maintenance standards to evaluate the effectiveness of sweeping activities and inspect 10% of the total street sweeping area for visible pollutants.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Street sweeping and dust control requirements were implemented during construction to control dust and to ensure that roads are kept clear of sediment and debris in accordance with Virginia Erosion and Sediment Control Handbook standards and specifications. Contractors used mechanical street sweepers or workers with brooms and shovels to ensure dirt and debris are not tracked onto roadways. Contractors used water trucks to suppress dust generated by construction activities.

The Fort Belvoir Operations and Maintenance contractor conducts a monthly street sweeping program to keep roads and parking lots clear of sediment and debris. Annually, 6,168,127 square yards of roadway and 6,821,433 square yards of parking lots are swept under this program.

BMP 6.4 Maintain Spill Response Vehicle/Trailer

- **Measurable Goal:** Maintain a minimum of one spill response trailer equipped with appropriate equipment and absorbents; ensure appropriate training of spill response personnel.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Fort Belvoir has a Spill Response Plan and maintained a spill response trailer at the North Post Fire Station (Building 2119) and a large quantity of spill response supplies at the 90-Day Temporary Hazardous Waste Storage Facility (Building 1495). Davison Army Airfield, Building 3161, maintained a spill response cabinet and the base operations maintenance contractor has spill-related supplies at Buildings 1114 and 1419. In addition, DPW ENRD has been updating spill response information and posting placards in strategic locations which contain information of what to do in case of a spill. (See Appendix E for a copy of the placard.)

Oil Spill Response and Recovery Training classes were conducted on September 24th and 26th and October 29th and 31st, 2013. There were a total of 58 attendees.

BMP 6.5 Support Stream Restoration

- **Measurable Goal:** Support one stream restoration project during the 5 year permit cycle, either on the installation or in partnership with the surrounding community for shared receiving water; advertise the activity on the website or in the *Belvoir Eagle* to encourage public participation, if applicable.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. DPW ENRD requested and received funds for one stream restoration project which will restore 695.7 linear feet of stream channel on an unnamed tributary of Accotink Creek. Construction will begin in September 2014.

BMP 6.6 Support “Self Help” Programs

- **Measurable Goal:** Fort Belvoir provides access to facilities at which tenants perform crafts or auto repair or accept chemicals and equipment for lawn maintenance. Prior to participating in such programs, individuals must understand proper use of the facility and the provided materials. Insert information about these programs into stormwater pamphlets and include information about “Self Help” programs on the Fort Belvoir website.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. During the reporting period, it was identified that this program

needs to be reevaluated to determine what components, if any, of the “Self Help” program are still being implemented in light of budget cuts. This program will be evaluated in permit year 2 to determine which “Self Help” programs are still being funded that would require education materials.

BMP 6.7 Develop and Implement Nutrient Management Plans

- **Measurable Goal:** In permit year 1, identify all applicable lands where nutrients are applied to a contiguous area of more than one acre. In permit year 2, 15% of all identified acres will be covered by nutrient management plans. In permit year 3, 40 % of identified acres will be covered by nutrient management plans. In permit year 4, 75% of identified acres will be covered by nutrient management plans. In permit year 5, 100% of identified acres will be covered by nutrient management plans.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. A review was conducted to identify all applicable lands where nutrients applied to a contiguous area of more than one acre. The following areas were identified that require coverage under nutrient management plans: Fort Belvoir Golf Course, Housing Areas, Defense Logistics Agency, Fort Belvoir North Area and Missile Defense Agency. Total acreage to be covered under nutrient management plans is approximately 380 acres.

BMP 6.8 Develop and Implement Stormwater Pollution Prevention Plans (SWPPP)

- **Measurable Goal:** In permit year 1, identify all municipal high priority facilities to include: composting facilities, equipment storage and maintenance facilities, materials storage yards, pesticide storage facilities, public works yards, recycling facilities, salt storage facilities, solid waste handling and transfer facilities and vehicle storage and maintenance yards. In permit year 2, develop and implement SWPPPs for all high-priority facilities identified in permit year 1.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. Funding was received in February 2014 and a contract was awarded in August 2014 for the development of a Master Stormwater Pollution Prevention Plan. Preliminarily it has been determined that Fort Belvoir’s high priority facilities include a composting facility, a recycling facility, equipment storage and maintenance facilities, materials storage yards, a recycling facility, salt storage facilities, a solid waste handling and transfer facility and vehicle storage and maintenance yards. The Master SWPPP is scheduled to be completed in May 2015.

- c. Results of information collected and analyzed, including monitoring data, if any, during the reporting period:** As part of the permit application process for the new VPDES Industrial Stormwater Major Permit (VA0092771), Fort Belvoir is completing sampling and analysis for 32 outfall locations throughout the installation. The permit application with sampling data for 21 outfalls was submitted to VADEQ, Northern Regional Office in Woodbridge, Virginia on June 3, 2013 (revised). While working with VADEQ, it was determined that additional locations should be covered under the permit and additional outfalls were added to the permit application. Each location is being analyzed for the constituents listed in EPA Form 3510-2F, Table 2F-1, 2F-2, 2F-3 and 2F-4. The sampling for the remaining eleven outfalls is still underway and the analysis is available upon request.

As part of the sampling and investigation under the Fort Belvoir PCB TMDL Action Plan, sampling of the stormwater for PCBs around Building 1495 was conducted in November 2013 with the sample results received December 2013.

- d. Summary of stormwater activities to be undertaken during the next reporting cycle:**

Stormwater activities to be undertaken during the next reporting cycle are located in the MS4 Program Plan, Section 7.0 (Appendix A).

- e. Changes in any identified best management practices or measurable goals for any of the minimum control measures including steps to be taken to address any deficiencies:** BMPs identified in the MS4 Program Plan dated September 2013 were reviewed and the following changes to the MS4 Program Plan have been made.

MCM#4 Construction Site Stormwater Runoff Control

Revision of BMP 4.1 to include the new requirement to send Erosion and Sediment Control Plans to VADEQ for approval for construction projects with land disturbance equal to or greater than 10,000 square feet.

Revision of BMP 4.4 to include the new requirement to require construction projects with land disturbance equal to or greater than one acre to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities

MCM#5 Post-Construction Runoff Control

Revision of BMP 5.1 to include the new requirement to send Stormwater Management Plans to VADEQ for approval for construction projects with land disturbance equal to or greater than once acre.

Revision of BMP 5.3 to clarify that construction projects possessing a VADEQ Construction General Permit will be inspected once every two weeks by Virginia Certified Stormwater Inspectors.

MCM#6 Pollution Prevention/Good Housekeeping for Municipal Operations

Move BMP 6.5 Support Stream Restoration to Section 5 since stream restoration is a function of Minimum Control Measure #5, “Post-Construction Stormwater Runoff Control” . Renumber BMPs under MCM#5 and 6 accordingly.

- f. **Notice that the operator is relying on another government entity to satisfy some of the permit obligations:** Not applicable.
- g. **Approval status of any programs pursuant to Section IIC (if appropriate), or the progress towards achieving full approval of these programs:** Not applicable.
- h. **Information required for any applicable TMDL special condition contained in Section I.**

(1) Polychlorinated Biphenyls (PCBs) TMDL

A PCBs TMDL Schedule for Implementation was provided to Virginia Department of Conservation and Recreation (VADCR) in a letter dated May 30, 2012. *Table 3. PCB TMDL Schedule for Implementation* in the MS4 Program Plan (Appendix A) has been updated.

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

BMP PCB.1 Develop Information Sheet on PCBs

- **Measurable Goal:** In permit year 2, develop an information sheet and make it available at Accotink Bay Wildlife Refuge Education Center, Fort Belvoir website, family housing resident guidelines, and other training avenues, as needed.
- **Status Update:** Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. The information sheet will be developed in permit year 2.

BMP PCB.2 Maintain a GIS Layer

- Measurable Goal: Annually update and maintain a GIS data layer that includes the locations of past and present PCB sites.
- Status Update: Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. There were no updates required.

BMP PCB.3 Develop and Implement PCB Sampling Plan

- Measurable Goal: In permit year 1, develop a PCB sampling plan to comply with PCB TMDL requirements. In permit year 2, implement the sampling plan.
- Status Update: Fort Belvoir exceeded this goal for the reporting period July 1, 2013 – June 30, 2014. This BMP was completed ahead of schedule. The sampling plan was developed as part of the *Virginia Pollutant Discharge Elimination System MS4 Permit, Fort Belvoir PCB TMDL Action Plan* prepared by Tidewater, Inc. dated March 2013. Sampling in accordance with this plan was conducted in December and results are submitted in Appendix G.

BMP PCB.4 Incorporate PCCB information into “BMP 6.1 Develop and Implement Written Training Plan”

- Measurable Goal: In permit year 2, incorporate materials into the training plan which specifically highlight transformer storage and reporting possible PCB leaks. In permit years 3 – 5, implement training plan.
- Status Update: Fort Belvoir exceeded this goal for the reporting period July 1, 2013 – June 30, 2014. This BMP was completed ahead of schedule. An Illicit Discharge Training Module was completed in June 2014 for use in permit year 2 and includes PCB information. This training will be implemented in permit year 2.

BMP PCB.5 Site Specific BMP for Building 1495

- Measurable Goal: In permit years 1 – 5 periodically conduct site visits to confirm containment materials are intact and perform routine maintenance of structural BMPs until PCB contamination is remediated.
- Status Update: Fort Belvoir met this goal for the reporting period July 1, 2013 – June 30, 2014. This area continued to be monitored and discussions are ongoing about strategy to address PCB contamination.

(2) **Bacteria TMDL – Accotink Creek**

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

(3) **Chesapeake Bay TMDL for Nitrogen, Phosphorous and Sediment**

The Department of Army submitted information for all Virginia Army installations to the Commonwealth of Virginia during preparation of the Virginia Chesapeake Bay Phase I & II Watershed Implementation Plans. The U.S. Army Corps of Engineers (USACE) was contracted by Installation Management Command to put together a database that contains site specific information for each Virginia Army installation which will assist Fort Belvoir in tracking phosphorous, nitrogen and sediment loading for the Chesapeake Bay TMDL. In addition, the database will assist with maintenance of stormwater management facilities by identifying maintenance requirements and tracking when the maintenance was completed. This database was updated as part of the maintenance inspection effort this year.

Phase II of the USACE project includes development of the Chesapeake Bay TMDL Action Plan. Phase II work is currently underway. USACE staff continues to work with the Virginia Department of Environmental Quality to ensure that reduction requirements are addressed in the Fort Belvoir Chesapeake Bay TMDL Action Plan. The Chesapeake Bay TMDL Action Plan is due by July 1, 2015.