



**Joint Base Langley Eustis - Eustis (JBLE-E)
Municipal Separate Storm Sewer System (MS4)
Annual Report, Permit Year (PY) 3
Reporting Period: July 1, 2015 – June 30, 2016
Permit No.: VAR040035**

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Glossary

AEM	Activity Environmental Manager
AIT	Advanced Individual Training
BEMA	Basic Environmental Management Awareness
CED	Civil Engineering Division
CFT	Cross-Functional Team
E&SC	Erosion and Sediment Control
EE	Environmental element
EMP	Environmental Management Plan
ESOH	Environmental Safety and Occupational Health
FSD	Forces Support Division
GIS	Geographical Information Systems
IDDE	Illicit Discharge Detection and Elimination
ISO	International Organization for Standardization
JBLE-E	Joint Base Langley Eustis - Eustis
LEMAC	Level 1, Basic Environmental Management Awareness and Competency
MCM	Minimum Control Measure
MFH	Military Family Housing
MS4	Municipal Separate Storm Sewer System
NMP	Nutrient Management Plan
POV	Privately-Owned Vehicle
PX	Post Exchange
PY	Permit Year
SDSFIE	Spatial Data Standards for Facilities, Infrastructure and Environment
SRP	Sustainable Range Program
SWM	Storm Water Management
SWPP	Storm Water Program Plan
SWPPP	Storm Water Pollution Prevention Plan
TA	Training Area
TMDL	Total Maximum Daily Load
VAC	Virginia Administrative Code
VDEQ	Virginia Department of Environmental Quality
VPDES	Virginia Pollutant Discharge Elimination System
WG	Wing

Certification Page

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PROGRAM PLAN
CERTIFICATION**

As required by Section III.K.2 of General Permit No. VAR040035, all reports required by state permits, and other information requested by the board shall be signed by a principal executive office or ranking elected official as described in 9 VAC 25-870-370(A), or a duly authorized representative.

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.

Type or Print the following information:

Name: MARK J. SCIACCHITANO Telephone No.: 757-878-3642

Official Title: DIR, 733 CED

Signature: 

Date Signed: 28 Sep 16

Permit Number: VAR040035 MS4 Name: Joint Base Langley-Eustis – Eustis

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1.0. JOINT BASE LANGLEY EUSTIS – EUSTIS BACKGROUND INFORMATION

The name and permit number of the program submitting the annual report.

Joint Base Langley Eustis – Eustis (JBLE-E) General Permit Number: VAR040035

The annual report permit year.

Permit Year #3 (PY3): July 1, 2015-June 30, 2016

Any modifications to any operator's/department's roles and responsibilities.

None.

The number of new MS4 outfalls and associated acreage by HUC added during the permit year: 0

A signed certification in accordance with Section II.E.3.a(5) of the MS4 General Permit:

See attached certification.

The status of compliance with permit conditions, an assessment of the appropriateness of the identified best management practices (BMPs), and progress towards achieving the identified measurable goals for each of the minimum control measures (MCMs).

JBLE-E has addressed all items required for Permit Year 3. Review of BMPs outlined in the MS4 Program Plan indicates BMPs remain appropriate, valid, and achievable.

JBLE-E has made acceptable and sustained progress toward achieving the measurable goals described in the MS4 Program Plan.

The result of information collected and analyzed, including monitoring data, if any, during the reporting period.

During PY3 no monitoring data was collected as part of the MS4 program. Visual monitoring of 55 JBLE-E non-industrial outfalls was accomplished for illicit discharges (see MCM 3).

Significant efforts related to information collection and analysis during PY3 are summarized below.

Goal: Develop Chesapeake Bay (Total Maximum Daily Load) TMDL Action Plan.

Achieved. A Chesapeake Bay TMDL Action Plan was developed for JBLE-E and approved by the Virginia Department of Environmental Quality (VDEQ). The Action Plan was developed and submitted with the annual report for PY2 and revised in PY3. The Action Plan will continue to be implemented in PY4.

Goal: Develop TMDL Action Plan for bacteria impairment.

Achieved. A TMDL Action Plan for bacteria impairment was developed for JBLE-E. A copy of the Warwick River and Skiffes Creek Bacteria TMDL Action Plan is included with this electronic submittal. The plan will be updated and fully implemented during PY4 and PY5.

Goal: Implement a turf and landscape Nutrient Management Plan (NMP) developed by a certified turf and landscape nutrient management planner in accordance with §10.1-104.2 of the Code of Virginia for all lands owned or operated by the installation where nutrients are applied to a contiguous area greater than one acre.

Achieved. NMPs were developed for the Pines Golf Course, Forces Support Division (FSD) Athletic Fields and Military Family Housing. Training was provided to affected personnel to ensure proper implementation of the plans.

Goal: Identify for inclusion on the installation priority list a project to conduct a condition assessment of the storm sewer system and update the GeoBase stormwater maps and data layers. This project will be subject to availability of funding.

Continued progress. At the end of the PY3, work was ongoing. The project includes: field investigations/survey of all drainage piping and inlets located within the non-industrial drainage basin areas on JBLE-E; and investigations/survey of retention ponds/BMPs and ditches within the non-industrial areas, not including swales. The contractor will provide feature identification type, condition, X,Y,Z coordinates, feature dimensions, construction materials, flow direction, invert of each rim, structure pipe size and drainage basin boundaries for nonindustrial outfalls. This effort is scheduled for completion during PY4.

Goal: Develop stormwater management (SWM) and erosion and sediment control (E&SC) contract language for insertion into contracts that require land disturbance for work performed on JBLE-E.

Achieved. Language has been added to Environmental Management Procedure (EMP) 4.4.6.16 Tab 1, *JBLE-Eustis Assessment Management Special Conditions and Affirmative Procurement* has been developed for inclusion in all contracts. The final version was approved in PY3, and is provided to all contracting officers for inclusion into any contract that requires environmental review.

Goal: Update SWM Environmental Management Plans (EMPs) to comply with requirements of new Virginia SWM and E&SC laws and regulations that became effective July 1, 2014.

Achieved. SWM EMPs have been updated to reflect the Virginia SWM and E&SC laws and regulations. EMPs are updated annually and each update requires a review of any changes to Federal, State and Air Force laws and regulations. EMPs are discussed in more detail in Section 7.0.

A summary of stormwater activities JBLE-E plans to undertake during the next reporting cycle. (July 1, 2016 – June 30, 2017)

- Plan Development/Update
 - Revise and update the JBLE-E MS4 Program Plan.
 - Implement and update JBLE-E Chesapeake Bay TMDL Action Plan and Bacteria TMDL Action Plan.
 - Implement and update the NMPs developed for the Pines Golf Course, Forces Support Division Athletic Fields and Military Family Housing.
 - Implement and update the Illicit Discharge Detection and Elimination (IDDE) plan.
 - Implement and update the Erosion and Sediment Control/Storm Water Standards and Specifications. These Standards and Specifications were not be submitted for VDEQ approval, but are used to provide guidance to contractors doing projects where land disturbance is less than 10,000 square feet.
 - Continue to identify “high priority” non industrial areas and ensure Storm Water Pollution Prevention Plans (SWPPPs) are in place.
- Incorporate EMP 4.4.6.16 Tab 1, *Assessment Management Special Conditions and Affirmative Procurement* into all contracts to address compliance with JBLE-E environmental requirements.
- Obtain contract support for maintaining the green roof on the Warrior Training Unit building 501. This roof was installed with two years of maintenance provided by the contractor, but has since not been maintained due to funding issues.
- Complete the storm sewer system survey to include GIS mapping of the non industrial areas of the storm water drainage system.
- Conduct annual inspection of identified BMPs. Conduct required maintenance and make recommendations for improvement.

Any changes in any identified BMPs or measureable goals for any minimum control measures including steps taken to address any deficiencies?

The MS4 Program Plan was reformatted and completely updated for PY3. The Table in Appendix A summarizes the changes included in this Plan update for PY4. This table also presents a schedule for planning for future updates in order to maintain compliance with MS4 Permit No. VAR040035. Program update requirements that are due at the end of PY4 or later are specified in this table. In addition, continuous review and updates for requirements that have already been addressed are also specified. Issues and information related to specific MCMs are discussed in the following sections.

Notice that you are relying on another government entity to satisfy some of the permit obligations (if applicable): N/A

The approval status of any programs pursuant to Section II C of the General Permit (if appropriate) or the progress towards achieving full approval of these programs: N/A

Information required for any applicable TMDL special conditions contained in Section I of the General Permit: N/A

2.0. MCM 1, PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

A list of the education and outreach activities conducted during the reporting period for each high priority water quality issue, the estimated number of people reached, and an estimated percentage of the target audience or audiences that will be reached shall be reported.

Three high priority water quality issues have been identified in accordance with MCM 1, Section II B.1.c of the General Permit. Details of the high priority water quality issues are summarized below and discussed in detail in Section 3.1 of the JBLE-Eustis MS4 Program Plan for PY4.

a. High priority water quality issue #1: Controlling Pet Wastes at the JBLE-E Dog Park, Military Family Housing (MFH), and at the Horse Stables

JBLE-E includes a dog park for use by residents of the Installation. The opening was highly publicized in local newspapers and on a local TV channel. The park has cypher lock controlled access; pet owners must register their pets and sign for receipt of the pet park rules. The rules emphasize “Dog owners/handlers must remove their dogs waste. Any person who violates the dog park rules may be removed and prohibited from returning to the park”. Additionally, pet waste stations are located at several places across the installation, including family housing.

JBLE-E operates a horse stable for authorized personnel to keep their horses. Stable bedding and manure are collected and disposed of offsite; however, horses use pasture land in good weather. Manure is left on pasture land, which is considered an agricultural land use. A roll off container is used for the collected stable bedding and manure. Users are briefed on good housekeeping practices to minimize the amount of animal wastes exposed to storm water.

Target audience: The main target audience will be MFH residents as well as the Dog Park and Horse Stable users.

Number of people reached: 500

Percentage reached: 20%

b. High priority water quality issue #2: Curbing illegal dumping within MFH and the dormitories

Training activities conducted were Basic Environmental Management Awareness (BEMA), Leadership Environmental Management Awareness Competency (LEMAC), and Advanced Environmental Management (AEM). See paragraph 25 for more information on the JBLE-E training program.

Target audience: The main target audience will be installation residents, including both MFH and the dormitories.

Number of people reached: 1000

Percentage reached: 20%

c. High priority water quality issue # 3: Training Area (TA) Erosion and sediment control

A total of 29 military Training Areas (TAs), comprise 3,519 acres. The majority of these areas are forested. TA 1 is not in a forested area, rather it has a shoreline training area adjacent to Skiff's Creek and has evidence of shoreline erosion. Contract work to complete an assessment as to the most effective way to fix the erosion has been completed.

The contractor used GIS mapping to document current conditions and develop management recommendations including costs for repair/remediation, developing the required environmental documentation, and impact if not repaired.

Target audience: JBLE Senior Leadership, 733rd Civil Engineer Division (733d CED), Range Control personnel, and FSD personnel.

Number of people reached: 10

Percentage reached: 33%

A list of the education and outreach activities that will be conducted during the next reporting period for each high-priority water quality issue, the estimated number of people that will be reached, and an estimated percentage of the target audience(s) that will be reached.

JBLE-E plans to utilize a combination of relevant messages and outreach materials to educate target audiences for each of the three high priority water quality issues, as well as other stormwater topics of interest to the public. Table 1 outlines planned education and outreach activities under MCM 1, *Public Education and Outreach on Stormwater Impacts*, for PY4 in accordance with Section II B.1.g (2) of the General Permit. Additional details are included in Section 3.1 of the JBLE-Eustis MS4 Program Plan for PY4. Several stormwater management informational brochures developed during PY3 are included in Appendix B. Distribution of these materials will continue in PY4.

Table 1: JBLE–Eustis Education and Outreach Plan for PY4

High Priority Water Quality Issue	Target Audience	Estimated Target Audience Population	20% of Estimated Population	Outreach Type	Outreach Timeframe
Controlling pet waste in Military Family Housing (MFH), at the horse stables, and the dog park	MFH residents and users of the installation dog park and horse stables	2,600	520	<ol style="list-style-type: none"> 1. Informational posts to the JBLE–Eustis and Balfour Beatty MFH Facebook pages 2. Outdoor Recreation will provide handouts of the rules of the dog park 3. 733d CED/Environmental element (EE) staff will visit the horse stables and dog park and speak with users of this facility about the stormwater program 	<ol style="list-style-type: none"> 1. Periodically throughout the permit year, but no less than semiannually 2. At the time that a new user registers for access to the dog park as well as annually to all registered users 3. Periodically throughout the permit year, but no less than semiannually

Table 1: JBLE–Eustis Education and Outreach Plan for PY4

High Priority Water Quality Issue	Target Audience	Estimated Target Audience Population	20% of Estimated Population	Outreach Type	Outreach Timeframe
Curbing illegal dumping within MFH and the dormitories	JBLE–Eustis residents, including those in MFH and the dormitories	5,000	1,000	<ol style="list-style-type: none"> 1. Publish articles in the Warrior newspaper related to illegal dumping (e.g., POV car washing in undesignated areas, littering, and disposal of household chemicals) 2. Informational posts to the JBLE–Eustis and Balfour Beatty MFH Facebook pages 3. Mass email to MFH residents regarding illegal dumping 	<ol style="list-style-type: none"> 1. Semiannually during the permit year (1 July – 30 June) 2. Periodically throughout the permit year, but no less than semiannually 3. Periodically throughout the permit year, but no less than semiannually

Table 1: JBLE–Eustis Education and Outreach Plan for PY4

High Priority Water Quality Issue	Target Audience	Estimated Target Audience Population	20% of Estimated Population	Outreach Type	Outreach Timeframe
Address TA erosion and sediment control	JBLE-E senior leadership, 733d CED, Range Control personnel, and FSD personnel	30	6	<ol style="list-style-type: none"> 1. 733d CED/EE to meet with Range Control personnel to discuss erosion and sediment control issues at the TA 2. Discuss at Wing (WG) and Cross-Functional Team (CFT) meetings, as well as Environmental Safety and Occupational Health (ESOH) Council briefings in order to develop outreach plans for TA users 	<ol style="list-style-type: none"> 1. Periodically throughout the permit year, specifically targeting times of high usage of the TA 2. Semiannually (February/August) at the scheduled CFT meeting and ESOH Council briefing

3.0. MCM 2, PUBLIC INVOLVEMENT/PARTICIPATION

A web link to the MS4 Program Plan and annual report.

Pursuant to MCM 2, Section II B.2.a (2), the MS4 Program Plan and Annual Report will be posted on the web link listed below.

<http://www.jble.af.mil/library/hurricaneinformation/index.asp>

Documentation of compliance with the public participation requirements of the General Permit.

The following discussion documents public participation for PY3 pursuant to MCM 2, Section II B.2.b of the General Permit. Additional details about current and future actions related to MCM 2 are included in Section 3.2 of the JBLE-Eustis MS4 Program Plan for PY4.

- a. Earth Day: Observation of Earth Day included a week of planned events to promote awareness of human-related impacts on the environment. Activities included trash and debris clean up, shoreline planting, wildlife education and a community day. The 633d Air Base Wing Public Affairs Office provided newspaper, Command TV Channel and social media exposure, and photography support. They also provided electronic marquee support at Fort Eustis gates to advertise Earth Week and asked for volunteers. The 2016 Earth Week was a tremendous success with respect to participation and accomplishments. With limited staff and resources, the numbers of volunteers and visitors, as well as the amount of effort, is worth noting. There were about 90 volunteers for the events from units and activities across JBLE-E including 15 for the shoreline planting, 46 for the wildlife boat tour and 16 for the box turtle survey. Additionally, 280cubic yards of mulch was given away, and 1,230 landscape plants were planted. Specific Earth week events included:
 - 1) Shoreline Plantings: On 19 April 2016, participants were given the opportunity to help preserve our shorelines by planting Spartina grasses along the shoreline to help slowdown erosion along the shores of Fort Eustis.
 - 2) Wildlife Boat Tour: On 20 April 2016, Fort Eustis Harbor Patrol/Security sponsored rides in the patrol boats to view the shorelines and spot wildlife. This offered individuals a look at Fort Eustis from the water and how many bird species have taken up residents here.
 - 3) Box Turtle Survey: On 21 April 2016, a turtle survey was conducted on JBLE-E to study the box turtle and their movements. This survey has been a staple in the Environmental office for the turtles offer a great advance notice of things out of balance in nature. The turtles were sized, marked and sex determined. Specimen where returned to their original finding place and released.

- 4) Balfour Beatty Community Day: On 22 April 2016, CED/CEIE supported the Earth Day Community Celebration. CED/CEIE provided information and recycled items to increase awareness of environmental stewardship and good ideas to recycle, reduce, and reuse. Displays, prizes and information provided.
- b. Clean the Bay Day: Fort Eustis participated in the 29th Annual Clean the Bay Day in conjunction with the City of Newport News on June 4, 2015. Seven participants removed approximately 200 pounds of trash from the Harrison Road shoreline.
- c. Fall Cleanup: JBLE-E staged the annual Fall Cleanup between 21 and 25 September 2015. During the 733d Command Sponsored fall cleanup, facility managers and supervisors performed “as needed” routine grounds maintenance such as trash removal from parking lots, edging, removal of weeds and leaves, as well as removing weeds from mulched areas. The event was publicized through Operations orders sent out via mass emails, publicized articles in the Peninsula Warrior Newspaper and through an announcement on the electronic marque at the main gate.
- d. Environmental Partnership: JBLE-E participates in the Secretary of the Air Force Program to partner with our local public and private neighbors. The Public-Public, Public-Private, Partnership Program (P4) seeks to identify and develop opportunities to share resources, increase efficiency and improve effectiveness of operational, educational, and recreational programs. The JBLE P4 program is currently focused on the Virginia Peninsula. As the program matures, there may be opportunities for broader partnerships.
- e. Communication with installation personnel and residents takes place on a regular basis through internal and external websites, the installation community cable channel, *the Warrior* newspaper, as well as regular interactions with various community groups (e.g., the Department of Game and Inland Fisheries, the York County Extension Office, and the Newport News Recycling office). An example of this type of communication and other Public Participation documentation is provided in Appendix C.

4.0. MCM 3, ILLICIT DISCHARGE DETECTION AND ELIMINATION

A list of any written notification of physical interconnection given by the operator to other MS4s.

N/A. There are no known physical interconnections with other MS4s.

The total number of outfalls screened during reporting period, the screening results, and details of any follow-up actions necessitated by the screening results.

In compliance with MS4 General Permit Section II.B.3f (2) for MCM 3, inspections of 55 of the 83 non-industrial stormwater outfalls were conducted. Inspection forms are kept on file with the JBLE-E Stormwater Program Manager and are available upon request.

A summary of each investigation conducted by the operator of any suspected illicit discharge, including how the investigation was resolved.

During PY3, JBLE-E finalized an IDDE Procedure Manual and IDDE EMP. The manual and associate procedure outline methods for community reporting, dry weather outfall screening, illicit discharge investigation and illicit discharge elimination. JBLE-E personnel will refer to the IDDE procedures to continue to ensure compliance with the installation's MS4 permit.

A summary of investigations of suspected illicit discharges and unauthorized releases of contaminants is provided as required by MCM 3, *Illicit Discharge Detection and Elimination*, Section II.B.3f (3) of the General Permit.

March 25, 2016: At approximately 0930 hours, personnel from Old Dominion Utility Services (ODUS) responded to a call for a clogged sewage line. Upon arrival, the crew discovered sewage flowing from a manhole located near Building 3306. The crew stopped the flow, and cleaned the lines. The spill was confined to a concrete driveway and two grassy areas, and the crew remediated the spill by utilizing lime.

February 2, 2016: At approximately 1337 hours, a sewage spill occurred adjacent to the Commissary (Building 1382). The spill resulted from someone flushing a large quantity of paper towels down the sanitary system, which clogged the pipe and resulted in a discharge of approximately 100 gallons of raw sewage. The spill was contained to land and did not contaminate any storm drains or bodies of water. Fire and Emergency Services and the Installation's on call Environmental Spill Manager were notified and responded to the emergency. Remediation efforts began immediately by ODUS, and the National Response Center and VDEQ were notified. Remediation was completed at approximately 1500 hours. The Commissary Store Manager was notified and asked to inform their employees and patrons about not flushing inappropriate items.

Any spill or unauthorized release, whether it enters the MS4 system or not, is reported in accordance with JBLE-E Environmental Management Procedure (EMP) 4.7.7, *Spill Prevention and Response*, and logged into a spill database by the Environmental Element Spill Program Manager.

5.0. MCM 4, CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The total number of regulated land-disturbing activities, the total number of acres disturbed, the total number of inspections and a summary of enforcement actions taken, including the total number and type of enforcement actions taken during this reporting period.

Reporting information for MCM 4, Section II B.4.f, is provided below.

- a. Total number of regulated land disturbing activities: 0
- b. Total number of acres disturbed 0
 - 1) Advanced Individual Training (AIT) Barracks Phase 3: 0
 - 2) Skiffes' Creek Dredge Spoils Area: 0
- c. Total number of oversight inspections by Environmental Element staff: 8
- d. A summary of actions taken during the reporting period is provided below.

On November 10, 2015 at approximately 0930 hours, JBLE-E environmental staff were informed of evidence of heavy sedimentation in a storm water drainage ditch in the Harrison Loop area. Staff immediately reviewed storm water system maps and determined the most likely source would be the construction site for the Advanced Individual Training Barracks Phase 3. An investigation of storm water drop inlets downstream from the Phase 3 site showed no sedimentation in storm water runoff. Further investigation of the area found a small building construction project at building 2301 was causing sediment to leave that sight and enter the storm sewer system. This site is adjacent to the barracks construction and flows to the same storm water drainage area. Contractor personnel were informed to immediately take the necessary steps to stop the runoff. This action was completed at 1200 on November 10, 2015.

6.0. MCM 5, POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW
DEVELOPMENT AND DEVELOPMENT ON PRIOR DEVELOPED LANDS

An electronic data base or spreadsheet of all stormwater management facilities brought online during the reporting period that contains all information required by Section II. B.5.e

For MCM 5, JBLE-E uses an Excel spreadsheet for tracking SWM facilities required by Section II B.5.e of the General Permit. The JBLE-E MS4 Stormwater Management Facility BMP spreadsheet is included with this electronic submittal.

Land disturbing activities for the Advanced Individual Training (AIT) Barracks Phase 2 project were included in the 2012 annual report to the Virginia Department of Conservation and Recreation under the previous permit. The SWM facilities associated with construction of the two barracks associated with this project, located at 2302 and 2303 Marshall Street, were brought online in February 2015.

7.0. MCM 6, POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

A summary report on the development and implementation of the daily operational procedures.

JBLE-E has an environmental management system that conforms to International Organization of Standardization, (ISO) 14001:2004, to manage environmental program requirements. JBLE-E codifies all base environmental requirements and management in JBLE Instruction (JBLE I) 32-101, *Environmental Management*. JBLE-E utilizes EMPs to implement the environmental program. These EMPs are reviewed and updated as required on an annual basis. Of the 140 plus current EMPs, the following list has the most direct impact on daily operations related to stormwater management. Copies of relevant EMPs are included with this electronic submittal.

- a. EMP 4.4.2, *Environmental Awareness & Competency Training*
- b. EMP 4.4.2 Tab 2, *Environmental Management Training Programs of Instructions (POIs)*
- c. EMP 4.4.6.2, *Wastewater-Stormwater Management*
- d. EMP 4.4.6.2.2, *Stormwater Management (SWM)*
- e. EMP 4.4.6.6, *Hazardous Materials Management (HMM)*
- f. EMP 4.4.6.7, *Solid Waste and Recycling Management*
- g. EMP 4.4.6.8, *Hazardous Waste Management (HWM)*
- h. EMP 4.4.6.12, *Integrated Pest Management (IPM)*
- i. EMP 4.4.6.14.1, *Aboveground Storage Tanks (AST) Management*
- j. EMP 4.4.6.14.2, *Underground Storage Tanks (UST) Management*
- k. EMP 4.4.7, *Spill Prevention and Response*
- l. EMP 4.5.2.1, *Activity Assessments Conducted by CED/EE*
- m. EMP 4.5.2.3, *Internal Inspections Conducted by Activities*
- n. EMP 4.5.2.3.1, *Activity Corrective Action Plans (ACAP)*
- o. EMP 4.4.6.16, Tab 1, *Assessment Management Special Conditions and Affirmative Procurement*

A summary report on the development and implementation of the required SWPPPs.

During PY3, JBLE-Eustis utilized only one SWPPP, which was designed to satisfy requirements of VPDES Individual Permit No. VA0025216. JBLE-E made the decision to include high priority non industrial facilities in the SWPPP so that they would be managed to the same standard as the base's industrial facilities. Non industrial facilities managed according to the current SWPPP include golf course operations, the PX gas station and associated facilities, and FSD Sports Field Maintenance. Subsequent to an EPA/VDEQ stormwater inspection in October 2015, JBLE-E developed a SWPPP for the PX facility.

JBLE-E has developed EMPs with the authority to implement all provisions of the Stormwater Program. In addition to installation-specific orders, the following Air Force guidance documents are applicable to the implementation of the program.

Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, 20 July 1994: This directive establishes that achieving and maintaining environmental quality is an essential part of the Air Force's mission. It mandates that an environmental quality program will be developed and implemented and that the program will be composed of four pillars: cleanup, compliance, conservation, and pollution prevention.

Air Force Instruction (AFI) 32-1067, *Water and Fuel Systems*, 4 February 2015: This AFI implements AFPD 32-10, *Installations and Facilities*, and AFPD 32-70, *Environmental Quality*. It provides guidelines for managing water and wastewater systems at United States Air Force bases. This instruction defines responsibilities and provides guidelines to help base civil engineers design, operate, and maintain Air Force-owned or operated water, wastewater, storm water, liquid fuels, and natural gas systems at installations and other enduring locations. This instruction provides references for design/construction, regulatory compliance, and operation and maintenance of these systems.

Air Force Instruction (AFI) 32-7047, *Environmental Compliance, Release, and Inspection Reporting*, 15 February 2012: This publication implements Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*. It applies to tracking, reporting, and managing Enforcement Actions (EAs) and Host Nation Enforcement Actions (HNEAs) issued by federal, state, local, and host nation regulatory agencies. It also applies to reporting and tracking of spills or releases, regulatory inspections, and compliance agreements (CAs). This Instruction defines the roles of applicable organizations within the Air Force (AF) as they pertain to environmental compliance, release, and inspection reporting.

A summary report on the development and implementation of the turf and landscape nutrient management plans that includes the total acreage of lands where turf and landscape nutrients plans are required, and the acreage of lands upon which turf and landscape nutrient management plans have been implemented.

JBLE-E property consists of areas of managed turf grass, including a 27-hole golf course, and three sports fields. Residential areas are managed privately, and a landscape contractor for Balfour Beatty Community regularly fertilizes 63 acres of turf. The Pines Golf Course, which comprised of 1000 acres, on Mulberry Island (latitude – 76.5993e longitude 37.1418n) receives regular fertilization. During PY3, individual Nutrient Management Plans (NMPs) were developed for the Pines Golf Course, FSD Athletic Fields, and Military Family Housing. Specific training for affected personnel regarding an introduction to the NMPs and procedures for implementation was accomplished. NMP training was provided for three attendees of 633d Forces Support Squadron on June 24, 2016. NMP training was provided for five individuals on June 23, 2016 for Balfour Beatty Communities and Brightview

Landscaping. NMP training was conducted for five employees on June 23, 2016 for the Pines Golf Course. Copies of relevant NMPs are included with this electronic submittal. The NMPs will be fully implemented in accordance with Table 1: Schedule of MS4 Program Plan Updates Required in this Permit.

A summary report on the required training, including a list of training events, the number of employees attending the training and the objective of the training.

Stormwater pollution prevention training is available for all base personnel, including those that handle Municipal Solid Wastes, Recycling Materials, Hazardous Materials, Hazardous Wastes, Non-Hazardous Wastes, Universal Wastes, and Hazardous Substances that have the potential to contaminate stormwater runoff at JBLE-E. There are two levels of more generalized training offered to base personnel: Level 1, Basic Environmental Management Awareness (BEMA) or Leadership Environmental Management Awareness and Competency (LEMAC) training; and Level 2, Advanced Environmental Management (AEM) training. The BEMA/LEMAC course is solely provided in an online format through the ESOHTN website (www.esohtn.com) and is required for all installation personnel within 30 days of arrival and annually thereafter. The AEM training is conducted in a classroom setting for initial training and an online course for annual refresher training. The Environmental Element also provides environmental awareness training for the US Army Transportation School, Advanced Marine Warrant Officers Course (WOAC) as needed.

The total number trained in each level during this reporting period were:

BEMA:	468	LEMAC:	2,493
AEM:	239	WOAC:	12

The objective of this training is to reach as many installation personnel as possible to educate them on a variety of environmental issues, including stormwater.

ESOHTN includes other stormwater-related training, including a Sediment and Stormwater Construction Training Course, Basic and Comprehensive Stormwater training courses, and an SPCC training course, as well as general courses on many relevant environmental topics such as water, wastewater, wetlands, and POL Management.

Appendix A

JBLE-Eustis MS4 Program Plan Update and Schedule Summary

(this document is being provided electronically)

JBLE-Eustis MS4 Program Plan Update and Schedule Summary

Minimum Control Measure / Special Condition	Program Update Requirement	Permit Reference	Required to be Completed By Date	PY4 MS4 Program Plan Update Summary	MS4 Program Future Schedule Summary
MCM 1 – Public Education and Outreach on Stormwater Impacts	High Priority Water Quality Issues	Section II.B c (1)	1 July 2014	<ul style="list-style-type: none"> • Changed one of the high priority water quality issues • Updated the Training Area issue with specifics for public education and outreach for potential new uses in PY4 • Included a description of progress on previous significant issues from PY2 and PY3 	<ul style="list-style-type: none"> • Assessments of the high priority water quality issues identified are provided in the annual report. • Annual reports, including assessments of the program, for each permit year are included in an appendix of the Program Plan.
MCM 3 – Illicit Discharge Detection and Elimination	Illicit Discharge Procedures	Section II.B.3	1 July 2014	<ul style="list-style-type: none"> • Development of an installation-wide draft policy • EMP update and enforcement • IDDE Procedure Manual distribution and implementation 	<ul style="list-style-type: none"> • Implement installation-wide IDDE Policy in PY4 • Review and update the EMP annually • Assess knowledge and implementation of the IDDE Procedure Manual via annual reports in PY4 and PY5
MCM 5 – Post-Construction Stormwater Management in New Development and Development on Prior Developed Lands	Individual Residential Lot Special Criteria	Section II.B.5.c (1)(d)	1 July 2014	<ul style="list-style-type: none"> • Not applicable to JBLE–Eustis 	<ul style="list-style-type: none"> • Not applicable to JBLE–Eustis
MCM 5 – Post-Construction Stormwater Management in New Development and Development on Prior Developed Lands	Operator-Owned Stormwater Management Inspection Procedures	Section II.B.5	1 July 2014	<ul style="list-style-type: none"> • BMP Prioritization Memo discussion included for development of a path forward with the program • JBLE–Eustis Stormwater Program Manager attended Stormwater BMP Inspection and Maintenance Training held by North Carolina State University in PY3. 	<ul style="list-style-type: none"> • Development of Post-Construction SCM Inspection Procedures specific to JBLE–Eustis to be completed in PY4 • Implementation of SCM Inspection and Maintenance Procedures in PY5
MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations	Identification of Locations Requiring SWPPPs	Section II.B.6.b	1 July 2014	<ul style="list-style-type: none"> • Updated existing list of municipal facilities requiring SWPPPs • Developed an additional appendix to the Program Plan (Appendix F) for SWPPPs to be stored • Included SWPPP excerpts related to facilities that are also included in the installation industrial SWPPP 	<ul style="list-style-type: none"> • Continue to review and update the list of municipal/non-industrial high priority facilities and determine if they require a SWPPP in PY4 and PY5 • Create additional SWPPPs based on the developed schedule in PY4

Minimum Control Measure / Special Condition	Program Update Requirement	Permit Reference	Required to be Completed By Date	PY4 MS4 Program Plan Update Summary	MS4 Program Future Schedule Summary
MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations	Nutrient Management Plan Locations	Section II.B.6.b	1 July 2014	<ul style="list-style-type: none"> Revised previously developed list of locations requiring Nutrient Management Plans 	<ul style="list-style-type: none"> Continue to review areas determined to require Nutrient Management Plans Develop additional plans as needed for newly identified areas
MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations	Training Schedule and Program	Section II.B.6	1 July 2014	<ul style="list-style-type: none"> Revised training schedules and requirements based on updates to EMP 4.4.2 Tab 2, <i>Environmental Management Training Programs of Instructions (POIs)</i> 	<ul style="list-style-type: none"> Review EMP 4.4.2 Tab 2 and interview installation personnel that manage the training program and update as needed
SC 1 – Special Conditions for Approved TMDLs Other Than Chesapeake Bay	Updated TMDL Action Plans (TMDLs approved before July of 2008)	Section I.B	1 July 2015	<ul style="list-style-type: none"> Not applicable to JBLE–Eustis 	<ul style="list-style-type: none"> Not applicable to JBLE–Eustis
SC 2 – Special Condition for Chesapeake Bay TMDL	Chesapeake Bay TMDL Action Plan	Section I.C	1 July 2015	<ul style="list-style-type: none"> Chesapeake Bay TMDL Action Plan was updated and resubmitted to VDEQ Chesapeake Bay TMDL Action Plan reference in Section 4.2 of the report and added in Appendix I of this Program Plan for reference 	<ul style="list-style-type: none"> Continue to implement the Chesapeake Bay TMDL Action Plan developed in PY2 and revised in PY3 Assess the implementation of the Chesapeake Bay TMDL Action Plan in the annual report and revise the Program Plan as necessary in PY4 and PY5
MCM 4 – Construction Site Stormwater Runoff Control	Stormwater Management Progressive Compliance and Enforcement	Section II.B.5	1 July 2015	<ul style="list-style-type: none"> Updated specifics related to ordinances and enforcement for the installation Referenced Engineering Technical Letter (ETL) 14-1, which the installation has adopted to provide guidance for inspections Included <i>Erosion and Sediment Control Standards and Specifications</i> specific to JBLE–Eustis in Appendix E of the Program Plan 	<ul style="list-style-type: none"> Implementation of JBLE–Eustis specific <i>Standards and Specifications for Erosion and Sediment Control</i>

Minimum Control Measure / Special Condition	Program Update Requirement	Permit Reference	Required to be Completed By Date	PY4 MS4 Program Plan Update Summary	MS4 Program Future Schedule Summary
MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations	Daily Good Housekeeping Procedures	Section II.B.6.a	1 July 2015	<ul style="list-style-type: none"> Reviewed good housekeeping procedures included in the PY3 MS4 Program Plan 	<ul style="list-style-type: none"> Continuous review and revision of good housekeeping procedures throughout PY4 and PY5 Assessments of procedures will be included in the annual report Updates to EMPs that address procedures will be made and noted in the Program Plan
SC 1 – Special Conditions for Approved TMDLs Other than Chesapeake Bay)	Other TMDL Action Plans for applicable TMDLs approved between July 2008 and June 2013	Section I.B	1 July 2016	<ul style="list-style-type: none"> Special Condition 1 text was updated to include a description of the Fecal Coliform TMDL Action Plan The Fecal Coliform TMDL Action Plan framework is included in Appendix H of the Program Plan. 	<ul style="list-style-type: none"> Develop the Fecal Coliform TMDL Action Plan based on the framework developed during PY3 Implement the Fecal Coliform TMDL Action Plan Review and revise the action plan as needed in PY4 and PY5 Assess the implementation of the Fecal Coliform Action Plan in the annual report and revise the Program Plan as necessary in PY4 and PY5
MCM 3 – IDDE – Applicable to new boundaries identified as “urbanized” areas in the 2010 Decennial Census	Outfall Map	Section II.B.3.a (3)	1 July 2017	<ul style="list-style-type: none"> Included a description of on-going updates performed by staff to the installation stormwater GIS mapping layers Included a description of progress of an on-going stormwater mapping and condition assessment project to include a timeline to completion Expected completion estimate for Spring 2017 (PY4) 	<ul style="list-style-type: none"> Outfall mapping update and condition assessment is on-going Completion of updated stormwater layers scheduled for Spring 2017 (PY4) Updates and assessments to be completed in the annual report
MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations	SWPPP Implementation	Section II.B.6.b (3)	1 July 2017	<ul style="list-style-type: none"> Revised the list of high priority municipal/non-industrial facilities Developed a schedule for the requirement to develop required SWPPPs Developed an additional appendix to the Program Plan (Appendix F) for SWPPPs to be stored Included SWPPP excerpts related to facilities that are also included in the installation industrial SWPPP in Appendix F 	<ul style="list-style-type: none"> Additional SWPPPs for high priority municipal facilities determined to have a high probability of pollutant discharge to be completed in PY4 Those facilities that currently have SWPPPs, or are incorporated into the Industrial SWPPP will continue to enforce the SWPPPs during PY4 Continuous assessment to be provided in the annual report

Minimum Control Measure / Special Condition	Program Update Requirement	Permit Reference	Required to be Completed By Date	PY4 MS4 Program Plan Update Summary	MS4 Program Future Schedule Summary
MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations	Nutrient Management Plan Implementation	Section II.B.6.c (1)(b)	1 July 2018	<ul style="list-style-type: none"> • Revised previously developed list of locations requiring Nutrient Management Plans • Included three Nutrient Management Plans developed during PY3 in Appendix G of the Program Plan • Developed implementation plan for each Nutrient Management Plan 	<ul style="list-style-type: none"> • Nutrient Management Plans developed in PY3 will be implemented in PY4 and PY5. • Assess implementation of the plan at each location (Pines Golf Course, Athletic Fields, and MFH) and include assessment in the annual report

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Appendix B
Stormwater Management Informational Brochures
(these files will be submitted electronically)

*Joint Base Langley Eustis-Eustis (JBLE-E)
MS4 Annual Report, Permit Year 3
July 1, 2015-June 30, 2016*

Appendix C
Public Involvement/Participation Documentation
(files will be provided electronically)

*Joint Base Langley Eustis-Eustis (JBLE-E)
MS4 Annual Report, Permit Year 3
July 1, 2015-June 30, 2016*