DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGION MID-ATLANTIC
1510 GILBERT ST.
NORFOLK, VA 23511-2737

IN REPLY REFER TO:

5090
EV14/05/RE616
SEP 27 2016

MS4 Permit and Compliance
Department of Environmental Quality
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, VA 23462

Ladies and Gentlemen:

SUBJECT: PERMIT YEAR 3 ANNUAL REPORT FOR CONSOLIDATED MS4 PERMIT (VPDES PERMIT #VAR040114)

As required by Section II.E.3 of the Virginia General Permit for Discharges of Stormwater from Municipal Separate Storm Sewer Systems, enclosed is the Permit Year 3 annual report for our consolidated MS4 Permit coverage.

If you have any questions, please contact Mrs. Angela Gent at (757) 341-0423.

Sincerely,

Phillip S. Winslow Jr.

PHILLIP S. WINSLOW, JR.
Director, Water and
Wastewater Compliance
By direction of the Commander

Enclosure

Certification Statement

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall, be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
3. The written authorization is submitted to the department.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phillip S. Winters Jr. 27 Sept. 2016

Responsible Official Signature Date

VAR040114 Navy Consolidated MS4

Permit Number MS4 Name

REGIONAL MS4 STORMWATER PROGRAM ANNUAL REPORT

For

Virginia General Permit for Small Municipal Separate Storm Sewer Systems; Permit #VAR040114 - Permit Year 3; 01JUL2015 to 30JUN2016 -

Submitted By:
Department of the Navy
Commander, Navy Region, Mid-Atlantic
Naval Facilities Engineering Command
1510 Gilbert Street
Norfolk, Virginia 23511

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*Please note the spreadsheet of BMPs brought online during the reporting year as well as the Non Bay TMDL Action Plans for Naval Support Activity Hampton Roads Portsmouth and Scott Center Annex are being submitted separately from the annual report.

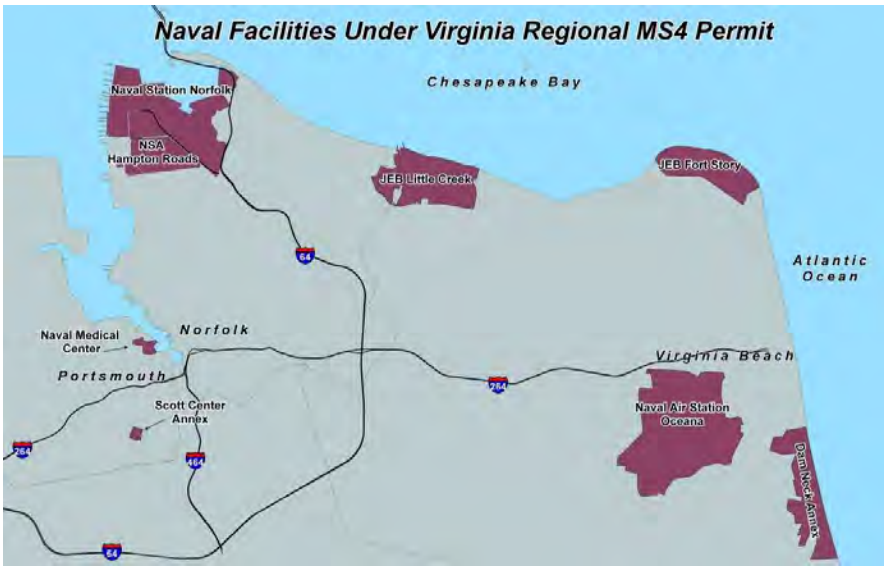
Introduction

In accordance with the reporting requirements set forth in the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, Virginia Regulation 9VAC25-890-40, the information provided within this annual report is intended to document MS4 program activities undertaken between July 1, 2015 and June 30, 2016. Specifically, this report presents the information requested in items (a) through (h) of section II.E.3 of the General Permit. The Naval installations in Virginia that are deemed regulated MS4's and that receive coverage under the Navy's Consolidated MS4 permit coverage are:

- Naval Station Norfolk*
- Naval Support Activity Hampton Roads*
- Naval Air Station Oceana*
- Dam Neck Annex*
- JEB Little Creek* & Fort Story*
- Scott Center Annex
- Naval Medical Center Portsmouth

**Indicates that the installation is also regulated under VPDES Industrial Permit.*

Unless otherwise specified, all data presented in this report represents the actions undertaken on a regional scale by the Stormwater Program for the installations in Hampton Roads, Virginia to satisfy the minimum control measures required by the VAR04 General Permit.



Background Information

(a.) Background Information.

(1) United States Navy Consolidated MS4, Permit Number: VAR040114

(2) Permit Year #3 – July 1, 2015 to June 30, 2016.

(3) Modification to operator's roles and responsibilities: Shawn Fluharty joined the Navy in December 2015. Shawn and Angela Gent are currently the MS4 Stormwater Program Media Managers and can be reached at:

Shawn Fluharty (757) 341-0382 shawn.fluharty@navy.mil

Angela Gent (757) 341-0423 angela.gent@navy.mil

(4) There were 00 new external outfalls constructed during permit year #3.

(5) The signed certification statement is included on page 06 of this report.

(b.) Status of Compliance.

- As part of the Navy's Environmental Management System (EMS) program both internal and external EMS & compliance audits are routinely performed at each installation to assess that all installation activities and programs conform to EMS requirements and environmental regulations. A review of the MS4 program activities undertaken at an installation is a component of an EMS audit when it is performed. During this permit cycle, there was one finding identified during an EMS audit at Naval Station Norfolk. A finding was identified for failure to conduct maintenance on Stormwater BMPs. We are currently working on establishing a Stormwater BMP Maintenance Program and have developed a Plan of Action with Milestones to comply with this requirement.
- The status of compliance with the permit conditions, an assessment of the appropriateness of the implemented best management practices, and progress toward achieving the identified measurable goals for each of the minimum control measures is contained in the data table found in Appendix-A of this report.
- An EPA audit was performed on the Navy's Municipal (MS4) Stormwater Program at Naval Station Norfolk on September 15 and 16, 2015 to observe the MS4 Program. We are pending the final compliance determination report.

(c.) Result of Information Collected.

- During PY3 no monitoring data was collected as part of the MS4 program. Outfall sampling and analytical monitoring is performed as part of the installation's VPDES industrial stormwater permits.

(d.) MS4 Program Activities.

- The following is a summary of the projects that the MS4 Program is already executing or is planning to perform during the PY4 reporting cycle:

  i. 2015 Municipal Separate Storm Sewer System Construction Site Inspections for Hampton Roads Installations. Scope of Work dated 4 March 2015; revised 29 April 2015; Project execution underway during MS4 PY3 and PY4. Refer to **Appendix B** for additional project information.

  ii. 2016 Municipal Separate Storm Sewer System Construction Site Inspections for Hampton Roads Installations. Scope of Work dated 6 May 2016; Project execution underway during MS4 PY4 and PY5. Refer to **Appendix B** for additional project information.

  iii. 2014 Municipal Separate Storm Sewer System Program Implementation for Hampton Roads Installations. Scope of Work dated 26 June 2014. Project was executed during MS4 PY2 and continued into PY3. Work was completed in August 2015. Project information was submitted in previous annual report.

  iv. 2015 Municipal Separate Storm Sewer System Program Implementation for Hampton Roads Installations. Scope of Work dated 29 July 2015; revised 16 September 2015. Project was executed during MS4 PY3 and PY4. Project is near completion. Refer to **Appendix B** for additional project information.

  v. 2016 Municipal Separate Storm Sewer System Program Implementation for Hampton Roads Installations. Scope of Work dated 5 May 2016;. Project execution underway during PY4. Refer to **Appendix B** for additional project information.

  vi. Non-Chesapeake Bay TMDL Action Plans for Hampton Roads Installations. Scope of Work dated June 2015. Project was executed during MS4 PY3. **Appendix B** contains additional project information.

  vii. Conceptual Designs for Identified Opportunities to Strengthen Storm Water Management to Comply with E.O. 13508 - Chesapeake Bay Protection and Restoration at Hampton Roads Installations. Scope of Work dated 30 July 2015; revised 23 September 2015. Project execution underway during MS4 PY3 and PY4. Refer to **Appendix B** for additional project information.

viii. The following projects are being conducted as part of the installation VPDES programs and are underway or are going to be executed during MS4 PY4 and involve stormwater mapping updates and site compliance evaluations with an IDDE survey component:

- 2016 Naval Air Station Oceana and Dam Neck Annex, VPDES Industrial Stormwater Pollution Prevention Plan Updates, Stormwater Pollution Prevention Map Updates, and Site Compliance Evaluations.
- 2016 Naval Station Norfolk (also includes Naval Support Activity, Hampton Roads) VPDES Industrial Stormwater Pollution Prevention Plan Updates, Stormwater Pollution Prevention Plan Map Updates, Site Compliance Evaluations and Cooling Tower and Boiler Inventory.
- 2016 Joint Expeditionary Base, Little Creek VPDES Industrial Stormwater Pollution Prevention Plan Updates, Stormwater Pollution Prevention Map Updates, Site Compliance Evaluations.
- 2016 Joint Expeditionary Base, Fort Story VPDES Industrial Stormwater Pollution Prevention Plan Updates, Stormwater Pollution Prevention Map Updates, Site Compliance Evaluations.

(e.) *Program Changes.*

- The following changes in best management practices and measureable goals were made for the current permit year.

  Numerous updates were made to the MS4 Program Plan which include: updating old and outdated information, converting guidance documents to SOPs, incorporating procedures into the plan that weren't previously included and reorganizing the appendices.

(f.) *Third Party Assistance.* Erosion and Sediment Control Plans and Stormwater Management Plans are submitted to VDEQ for plan review and approval. Refer to **Appendix C** for Erosion and Sediment Control and Stormwater Management Plan Approval SOP's.

(g.) *Alternative Programs.* N/A.

(h.) TMDL Special Conditions.

- Annual reporting requirements per Section I.B.5

  i. Section I.B.5 (a) –The Local/Non-Chesapeake Bay TMDL Action Plan for Naval Air Station Oceana (NASO) was due with the PY2 annual report submittal although because of delays in the acquisition process the Local TMDL Action Plan for NASO wasn't submitted until February 11, 2015. The VDEQ approved the NASO Local TMDL Action Plan on March 14, 2015. Local /Non-Chesapeake Bay TMDL Plans were developed for NSA Hampton Roads Portsmouth Annex (NSA HR Portsmouth Annex and also known as Navy Medical Center Portsmouth) and Scott Center Annex (SCA) in accordance with the schedule set forth in Table 1 of the Permit and electronic copies are being submitted separately from the annual report.

  ii. Section I.B.5 (b) – See **Appendix D** for an evaluation of the implementation of the NASO TMDL Action Plan. Implementation of the NSA HR Portsmouth Annex (aka NMCP) and Scott Center Annex TMDL Action Plans will begin after they are submitted to and approved by VDEQ.

- Annual reporting requirements per Section I.C.4

  i. Section I.C.4 (a) – The Navy MS4 Program has developed a Chesapeake Bay TMDL Action Plan in accordance with the schedule set forth in Table 1 of the Permit. The Chesapeake Bay TMDL Action Plan was submitted as a separate attachment with the PY2 annual report. The VDEQ approved the Chesapeake Bay TMDL Action Plan on January 12, 2016.

  ii. Section I.C.4 (b) – N/A at this time.

  iii. Section I.C.4 (c) – N/A at this time.

  iv. Section I.C.4 (d) – The calculations show that the Best Management Practices (BMPs) installed between January 1, 2006, and June 30, 2014, provide pollutant reductions for the pollutants of concern (POCs) that go beyond the required reductions for the first permit cycle (218.8 lbs/yr for TN, 37.7 lbs/yr for TP, and 25,891 lbs/yr for TSS). Therefore, no additional BMPs are required to be installed before the end of the first permit cycle (June 30, 2018).

Certification Statement

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall, be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above;
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
3. The written authorization is submitted to the department.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Responsible Official Signature Date

VAR040114 Navy Consolidated MS4

Permit Number MS4 Name

Permit Required Annual Reporting Information

1. **In accordance with MS4 General Permit Section II.B.1.g the operator of the permit shall include the following information in the annual report submitted to the Department for the MS4 PY3 permit term:**

    a) 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. The following table 1.1 provides this required reporting information.

Table 1.1:

List of Activities Conducted (PY3)	Estimated Number of People Reached
ECATTS Training: Stormwater Comprehensive Overview	3556
ECATTS Training: Sediment and Stormwater Construction (Module 1-9)	229
ECATTS Training: Stormwater General	83
ECATTS Training: Env. Compliance and Enforcement	3082
ECATTS Training: Env. Requirements for Contractors	102
ECATTS Training: General Env. Compliance	2957

ECATTS Training: Spill Response	105
ECATTS Training: Spill Prevention C & C	5341
ECATTS Training: Pollution Control	1021
ECATTS Training: Pollution Prevention (2 modules)	1953
Installation Environmental Trainings Face to Face w/ Tenants (Various Stormwater Topics)	3196
EV Construction Inspection training Face to Face w/ FEAD	33
Stormwater Tri-Fold Brochure Distribution (4 Brochure Topics)	1381
Virginia Beach Patriotic Festival	Est. 5,000
Navy Medical Center Portsmouth Share Point, BOMI, EV website	58
The Flagship Newspaper Stormwater Outreach Article #1	Est. 10,000*
The Flagship Newspaper Stormwater Outreach Article #2	Est. 10,000 *

The Flagship Newspaper Stormwater Outreach Article #3	Est. 10,000 *
The Flagship Newspaper Stormwater Outreach Article #4	Est. 10,000 *
Display signs describing Stormwater Management Facilities (in various location throughout the bases)	Est. 2000
Estimated Number of People Reached (Total):	**70,097**
Estimated Percentage of Target Audiences:	**58%**

**** The Flagship newspaper is published weekly, distributing 35,000 copies to 800 locations with a customer base of 275,000 and an online audience of 70,000.***

b) 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 that will be reached.

Table 1.2:

List of Activities To Be Conducted (PY4)	All activities identified in Table 1.1 will be performed again during PY4.
Estimated Number of People To Be Reached:	**73,000**
Estimated Percentage of Target Audiences To Be Reached:	**60%**

2. **In accordance with MS4 General Permit Section II.B.2.d the operator of the permit shall include the following information in the annual report submitted to the Department for the MS4 PY3 permit term:**

   a) The web link to the MS4 Program Plan and annual report:

   http://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_compliance.html

   b) Documented compliance with Section II.B.2 of the General Permit: (see **Appendix E** for some of the Public Participation Event details)

Table 2.1:

Public Participation Events for MS4 PY3	
Earth Day Event on 20 APR 2016	JEB Little Creek & Fort Story
Earth Day / Arbor Day – 28 APR 2016	NSA Hampton Roads
Earth Day Event – 21 APR 2016	Naval Medical Center Portsmouth
Earth Day Event – 22 APR 2016	NNSY/SCA
Earth Day Event – 22 APR 2016	Naval Station Norfolk
Volunteer Wetland Restoration Partnering Project - 19 – 23 APR 2016	Mayflower Road Norfolk, VA
Arbor Day Celebration - 29 OCT 2015	Naval Station Norfolk
Arbor Day Celebration - 27 OCT 2015	JEB Little Creek & Fort Story
Clean the Station Day – 16 OCT 2015	Naval Station Norfolk
Volunteer Dune Restoration Event – 23-24 OCT 2015	NAS Oceana Dam Neck Annex
Christmas Tree Recycling – DEC 2015 –JAN 2016	NAS Oceana Dam Neck Annex
Christmas Tree Recycling – DEC 2015 –JAN 2016	JEB Little Creek & Fort Story
Clean the Bay Day – 4 JUN 2016	NASO Dam Neck Annex
Clean the Bay Day – 3 JUN 2016	Fort Story
Clean the Bay Day – 3 JUN 2016	JEB Little Creek
Clean the Bay Day – 3 JUN 2016	NSA Hampton Roads
Clean the Bay Day – 4 JUN 2016	Naval Station Norfolk

Clean the Bay Day – 3 JUN 2016	Norfolk Navy Shipyard (includes Annexes)
Clean the Bay Day – 3 JUN 2016	Naval Medical Center Portsmouth
Clean the Bay Day – 3 JUN 2016	NWS Yorktown & Cheatham Annex
Clean the Bay Day – 2 JUN 2016	Lafayette River Annex
Storm Drain Marking Program – 21-22 DEC 2015	87 Storm Drain Medallions installed at JEB Little Creek

3. **In accordance with MS4 General Permit Section II.B.3.f for Illicit Discharge Detection and Elimination the MS4 operator is required to provide the following information with the annual report for permit year #3.**

   a) A list of any written notifications of physical interconnections given by the operator to other MS4's. Written notifications of interconnections were provided to the City of Virginia Beach, City of Norfolk, City of Portsmouth and Virginia Department of Transportation in PY2. There were no known physical interconnections identified in PY3.

   b) The total number of outfalls screened during the reporting period, the screening results, and detail of any follow-up actions necessitated by the screening results. Per MS4 Permit Section II.B.3(c)(1) if the regulated MS4 operator has more than 50 outfalls, a minimum of 50 outfalls were required to be screened. The following table provides the required reporting information to the Department for MS4 PY3:

Table 3.1:

Total # of Outfalls Screened in PY3	Screening Results and Follow-up Actions
124	See **Appendix F**

   c) A summary of each investigation conducted by the operator or any suspected illicit discharge.
      a. Outfall evaluations were attempted at 129 outfalls at Naval Station Norfolk and NSA Hampton Roads although only 107 outfalls were observed due to access issues. A total of 14 outfalls were evaluated at Naval Air Station Oceana and 3 were inspected at Dam Neck Annex. None of the outfalls revealed any physical indicators or evidence of pollution. See **Appendix F** for Screening Results.

         In addition any spills or unauthorized releases, whether it enters the MS4 system or not, is reported in accordance with State reporting

requirements and the Navy Spill Response and Reporting SOP. A copy of all 5-day letters generated, as well as a log of all reported spills, are retained on file by the Navy Spill Program Manager and Installation Environmental Department. A copy of the spill program SOP has been provided in **Appendix G.**

b. Illicit discharge surveys have occurred at the following installations as follows:
   i. Naval Air Station Oceana – Completed August 2012.
   ii. Dam Neck Annex – Completed July 2014.
   iii. Naval Station Norfolk – Completed 2015.
   iv. NSA Norfolk – Completed 2015.
   v. Scott Center Annex – Completed in 2014.
   vi. Naval Medical, Portsmouth –Completed in 2014.

4. **In accordance with MS4 General Permit Section II.B.4.f the operator of the permit shall track regulated land-disturbing activities and include the following information in the annual report submitted to the Department for the MS4 PY3 permit term. The information provided is for regulated construction activities performed at installations regulated under the Navy's MS4 Permit coverage.**

   a) The total number of regulated land-disturbing activities;
   b) The total number of acres disturbed;
   c) Total number of inspections performed;
   d) A summary of enforcement actions taken.

Table 4.1:

# of Regulated Activities	# of Acres Disturbed	# of inspections
38	281.74	1300
Summary of Enforcement Actions	There was 01 enforcement action taken on a project during PY3 at one of the Navy installations regulated under VAR040114. Enforcement consisted of a stop work order being issued until the project was brought into compliance.	

See **Appendix H** for the Procedures implemented for MS4 Construction Site Inspections as well as the Construction Inspection Annual Report that contains information pertaining to the land disturbing activities that occurred at each installation during MS4 PY3.

5. **In accordance with the annual reporting requirements identified in MS4 General Permit Section II.B.5.e, the operator of the permit must include the**

following information in the annual report submitted to the Department for the MS4 PY3 permit term:

a) The operator shall submit an electronic database or spreadsheet of all stormwater management facilities brought online during each reporting year with the appropriate annual report. A spreadsheet of all stormwater management facilities brought online during each PY3 is being submitted as a separate electronic file.

b) The operator completed 281 inspections of stormwater facilities during PY3.

c) There were 00 enforcement actions during PY3.

d) There were 99 (71 - MS4 and 28 - Non-MS4) new stormwater facilities brought online during PY3.

6. **In accordance with the annual reporting requirements identified in MS4 General Permit Section II.B.6.g (1-4), The MS4 program submits the following information to the Department for PY3.**

a) A summary report on the development and implementation of the daily operational procedures:

In accordance with the Permit the operator must develop, within 24 months of permit coverage, written policies and procedures for good housekeeping and pollution prevention for operations. The Navy has developed Good Housekeeping Policies and Procedures for Municipal Operations. The Good Housekeeping Policies and Procedures have been provided to the PWD Department Supervisors to begin implementing. Implementation of these policies and procedures will be fully implemented and enforced in PY 4. A copy of the Good Housekeeping Policies and Procedures for Municipal Operations is included in **Appendix I.**

b) A summary report on the development and implementation of the required SWPPP's:

In accordance with the General Permit Section II.B.6, within the first 12 months of permit coverage the operator shall identify all municipal high priority facilities. Within 48 months of coverage, the operator shall develop and implement stormwater pollution prevention plans for all high priority facilities. There were 48 facilities that were identified as municipal high priority facilities during the initial review. During PY2 the MS4 program executed a project through an A/E firm which identified a total of 25 facilities that have a high potential for discharging pollutants, and which are not covered under a separate VPDES permit. High Priority

Municipal SWPPPs were prepared for each facility identified. Implementation of some of the SWPPPs began in PY3 and will fully be implemented in PY4. **Appendix J** contains the list of High Priority facilities. Copies of the SWPPPs are retained on file for each of the facilities and can be provided upon request.

c) A summary report on the development and implementation of the turf and landscape nutrient management plans, that include (i) the total acreage of lands where NMP's are required and (ii) the acreage of lands where NMP's have been implemented.

Nutrient Management Plans have been developed and are being implemented for The Stables at Naval Air Station Oceana, Eagle Haven Golf Course at Joint Expeditionary Base Little Creek, The Tomcat at Naval Air Station Oceana, The Hornet at Naval Air Station Oceana, Sewell's Point at Naval Support Activity Hampton Roads and for all lands where nutrients are applied to prestige areas (contiguous areas greater than one acre excluding golf courses).

All NMPs were developed by certified turf and landscape nutrient management planners in accordance with § 10.1-104.2 of the Code of Virginia. **Appendix K** contains a table with the total acreage for sites where nutrient management plans have been developed. Copies of the NMP's are being retained on file for each of the facilities and can be provided upon request.

d) A summary report on the required training, including a list of training events, training dates, number of employees trained, and training objective.

The MS4 Program currently utilizes the Environmental Compliance Assessment, Training, and Tracking System (ECATTS) as the primary training mechanism to satisfy requirements found in MS4 Permit Section II.B.6. This system is designed to provide an understanding and awareness of the environmental requirements established by the United States Environmental Protection Agency (EPA), the United States Department of Defense (DoD), and the State for which each installation is located. A tenant's occupation determines which ECATTS training course they would need to take. ECATTS training currently provides several trainings specific to stormwater pollution prevention. New employees and contractors are typically required to complete training modules within ECATTS that are specific to their AOR's prior to working on an installation. See Table 1.1 for a list of Stormwater specific trainings that are provided through ECATTS as well as face to face trainings held between July 1, 2015 and June 30, 2016.

A copy of the ECATTS course catalog which includes a list of all trainings provided through ECATTS as well as the training objective was provided in PY1 annual report. Copies of the training modules and personnel that completed the trainings are retained on file for each of the installations and can be provided upon request.

A written training plan including a schedule of training events has been developed and will be implemented in PY4 to further define training procedures and requirements. Refer to **Appendix L** for a copy of the MS4 Training Plan.

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Appendix A – MS4 Program Permit Year #3 Annual Reporting Data Table

Appendix B – MS4 Program Project Execution, MS4 PY3/PY4

Appendix C – ESC Plan and SWM Plan Approval SOPs

Appendix D –NASO TMDL Action Plan Implementation

Appendix E – Supporting Documentation for Public Participation Events

Appendix F – Outfall Screening Data

Appendix G – Navy Spill Response and Reporting SOP; Hampton Roads Installations

Appendix H – Construction Site Annual Report and Inspection Procedures

Appendix I – Good Housekeeping Policies and Procedures

Appendix J – High Priority MS4 Facilities

Appendix K – Nutrient Management Plan Locations and Acreage

Appendix L – MS4 Training Plan

Appendix A – PY3 Annual Reporting Data Table

Navy MS4 Stormwater Permit VAR040114 - Permit Year #3 Annual Reporting Data Table

MCM	BMP Number	BMP Name	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	PY3 Measurable Goals Progress	PY3 Status of Compliance
Chesapeake Bay TMDL	A-1	TMDL Action Plan	Develop and implement a Chesapeake Bay TMDL Action Plan.	In permit years 1 and 2, develop the TMDL Action Plan. In permit years 3 through 5 implement the action plan.	Retain a copy of the Chesapeake Bay TMDL Action Plan.	Phase II Water Program Media Manager	Plan was submitted and approved; no additional bmps are required to be installed before the end of the first permit cycle (June 30, 2018)		Compliant
Chesapeake Bay TMDL	A-2	Annual Reporting	Submit annual reports documenting the status of installing control measures.	Submit annual reports in permit years 3 through 5.	Record a list of control measures implemented, the corresponding pollutant reductions, and control measures to be implemented.	Phase II Water Program Media Manager	No additional bmps are required to be installed before the end of the first permit cycle (June 30, 2018)		Compliant
Other TMDLs	B-1	TMDL Action Plans	Develop and implement TMDL Action Plan for WLAs.	A TMDL Action Plan for NASO will be developed in PY 1 through 2. TMDL Action Plans will be developed for NMCP and SCA during PY 1 through 3. Plans will be implemented after development.	Retain a copy of each TMDL Action Plan.	Phase II Water Program Media Manager	NASO submitted and approved; NSA HR PA and SCA developed and is being submitted with PY3 annual report		Compliant
1	1.1	Environmental Awareness Trainings for Target Audiences	Conduct training for the target audiences for the Three Priority Water Quality Issues.	In permit year 1, evaluate and update stormwater pollution prevention materials utilized as part of the Environmental Awareness Training Program. In permit years 2 through 5, revise the new materials as needed and conduct trainings annually.	Track the number of trainings conducted pertaining to each of the priority water quality issues and the number of people trained.	Phase II Water Program Media Manager and Installation Water Program Media Manager	Annually		Compliant
1	1.2	Stormwater Management Training through ECATTS	Conduct training for the target audiences through a web-based system called Environmental Compliance Assessment, Training, and Tracking System (ECATTS)	In permit years 1 through 5 annually review and update the ECATTS stormwater training modules as needed.	Record and report the number of people trained on each stormwater training module presented through ECATTS.	Phase II Water Program Media Manager and Installation Water Program Media Manager	Annually		Compliant

MCM	BMP Number	BMP Name	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	PY3 Measurable Goals Progress	PY3 Status of Compliance
1	1.3	Stormwater Education Brochures	Brochures for the Three Priority Water Quality Issues will be developed and distributed.	In permit years 1 through 5, on a semi-annual basis distribute stormwater educational brochures to targeted areas.	Retain a copy of each brochure distributed and record the date, location, and number of brochures distributed.	Phase II Water Program Media Manager	Semi-Annually		Compliant
1	1.4	Newspaper Articles and Ads	Place articles and/or ads in installation newspapers such as the Flagship and Jet Observer or Plan of the Week emails.	On a semi-annual basis, in permit years 1 through 5 include at least one article/ad in base publications addressing stormwater pollution prevention.	Retain a copy of all articles/ads published and record the dates of publication.	Phase II Water Program Media Manager	Semi-Annually		Compliant
1	1.5	External Website	Maintain a website that the general public can access that includes information about stormwater education.	In permit years 1 update the NAVFAC website with MS4 Program information. In PY2-PY5 maintain the website and update content as needed.	Document the updates made to the website each permit year and track the number of hits that the website has per year .	Phase II Water Program Media Manager	Annually		The development of a MS4 Permit Program Website is in progress.
1	1.6	Car Wash Areas	Place articles in installation newspapers and/or in the "Plan of the Week" about the designated car wash areas.	In permit years 1 through 5, track the number of time each installation's car wash area is used.	Retain copies of all articles or SOP's published related to car washing. Track the number of times each car wash is used.	Phase II Water Program Media Manager	Annually		Compliant
1	1.7	Evaluation and Assessment	Annually evaluate and assess the Public Education and Outreach Program to effectiveness	In permit years 1 through 5, on an annual basis, estimate the number of people reached and the percentage of people reached in each target audience. Address any weakness or shortcomings as necessary.	In accordance with Section II of 4VAC50-60-1240.	Phase II Water Program Media Manager	Annually		Compliant
2	2.1	Post the MS4 Program Plan and Annual Report	Make the stormwater program plan and other stormwater program information available through the website.	In permit year 1, post the MS4 Program Plan on the website and notify the "public" through the Plan of the Week of its availability for review. In permit years 2 through 5, update the MS4 Program Plan as needed and post the Annual Report in accordance with Section II of 4VAC50-60-1240. Provide for receipt of comment.	Track all comments and responses received from "public" reviews.	Phase II Water Program Media Manager	Continuously		Compliant; numerous updates were made to the Program Plan. The updated Program Plan is posted on the website.

MCM	BMP Number	BMP Name	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	PY3 Measurable Goals Progress	PY3 Status of Compliance
2	2.2	Storm Drain Marking Program	Place storm drain markers on inlets to the MS4 reminding the public that flows that drain into the system go directly to streams and waterways.	In permit year 1, evaluate and target areas for storm drain marking efforts. In permit years 2 through 5, conduct annual storm drain marking efforts	Record location, date, number of storm drains marked, and if applicable the number of volunteer participants for each storm drain marking event	Phase II Water Program Media Manager	Annually		Compliant
2	2.3	Local Activity Participation	Participate during the Annual Clean the Bay Day and Earth Day Events held at the installation. Outreach information will be distributed during these events.	In permit years 1 through 5, promote installation participation in the Clean the Bay Day and Earth Day Events at various installations.	For Clean the Bay Day, record the number of volunteers utilized and an estimate of the volume of litter collected. For both events, document outreach materials distributed.	Phase II Water Program Media Manager	Annually		Compliant
2	2.4	Evaluation and Assessment	Annually evaluate and assess compliance.	In permit years 1 through 5, on a annual basis, evaluate and assess progress towards meeting measurable goals.	In accordance with Section II of 4VAC50-60-1240.	Phase II Water Program Manager	Annually		Compliant
3	3.1	Maintain Storm Sewer System Map	Maintain an accurate storm sewer system map in accordance with Section II of 4VAC50-60-1240.	In permit year 1, identify required updates to the storm sewer system map at each installation. In permit years 2 and 3, update the maps accordingly. In permit years 4 and 5, maintain and update the mapping as needed.	Record revision dates on storm system mapping for each regulated installation.	Installation Water Program Media Managers; Phase II Water Program Media Manager	Annually		Compliant
3	3.2	Written Procedures and Dry Weather Screening	Develop and implement written procedures to detect, identify, and eliminate illicit discharges in accordance with Section II of 4VAC50-60-1240.	In permit year 3, finalize draft procedures to detect, identify and eliminate illicit discharges. These procedures will likely be identified as Standard Operating Procedures (SOP). In permit years 3 through 5, implement these final procedures.	Document the number of outfalls screened, the screening results, and other pertinent details. Document each investigation into a suspected illicit discharge. All reporting shall be in accordance with Section II of 4VAC50-60-1240.	Phase II Water Program Media Manager	Continuously		In progress
3	3.3	Promote, Publicize, and Facilitate Public Reporting	Use reporting mechanisms such as hotlines, email, and website links to allow the public to report suspected illicit discharges.	In permit year 1, generate a hotline phone number, an email address, and/or a website link for public reporting of suspected illicit discharges. In permit years 2 through 5, publicize this information through public outreach BMPs.	Record the details (date, problem location, etc.) and number of the reports received using each reporting mechanism.	Phase II Water Program Media Manager	Continuously		Compliant

MCM	BMP Number	BMP Name	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	PY3 Measurable Goals Progress	PY3 Status of Compliance
3	3.4	Public Education for Illicit Discharges	Through the use of BMPs identified in MCM#1 and MCM#2, educate the public regarding illicit discharges.	In permit years 1 through 5, include information addressing illicit discharges in the BMPs used in MCM#1 and MCM#2.	Retain copies of materials published and dates of publication. Document the number of people trained annually.	Phase II Water Program Media Manager	Annually		Compliant
3	3.5	Spill Control Documentation	Report Spills to DEQ and DCR and document in accordance with the Spill Reporting and Documentation SOP.	In permit years 1 through 5, report spills to the proper authorities and retain a copy of the initial report and the 5-day spill letter.	Retain copies of all spill reports and letters.	Spill Program Media Manager	Continuously		Compliant
3	3.6	Evaluation and Assessment	Annually evaluate and assess the illicit discharge program for compliance and effectiveness.	In permit years 2 through 5, on a annual basis, evaluate and assess progress towards meeting measurable goals	In accordance with Section II of 4VAC50-60-1240.	Phase II Water Program Media Manager	Annually		Compliant
4	4.1	Legal Authority	Utilize legal authority to address discharges entering the MS4 from certain land-disturbing activities.	In permit year 1, identify and install legal mechanisms. In permit years 2 through 5, implement these policies and procedures.	Retain copies of documents outlining the policies and procedures.	Phase II Water Program Media Manager	Continuously		Compliant
4	4.2	Approval of Erosion and Sediment Control Plan	Require that all Erosion and Sediment Control Plans are approved prior to commencement of the land disturbing activity.	In permit year 1 conduct meetings with VDEQ to identify process and update internal SOP's. In PY2 through PY5 distribute and follow SOP's for Erosion and Sediment Control Plan approval.	Retain copies of all approved plans. Document the number of plans approved annually.	Phase II Water Program Media Manager; NAVFAC CI Division	Continuously		Compliant
4	4.3	VSMP Construction Permit Instruction	Maintain and enforce the VSMP Construction Permit Instruction.	In permit year 1, convert the VSMP Construction Permit Instruction to an internal SOP. In PY 1 through PY 5 distrbute and ensure adherance to SOP.	Track number of VSMP Permits obtained for regulated activities.	Phase II Water Program Media Manager	Continuously		Compliant
4	4.4	Construction Activity SWMP & SWPPP Review	Review SWMPs and SWPPPs to ensure that each plan is consistent with the requirements set forth in the Virginia Stormwater Management Regulations and the VSMP Construction Permit Instruction.	In permit year 1 conduct meetings with VDEQ to identify process and update internal SOP's. In PY2 through PY5 distribute and follow SOP's for Stormwater Management Plan approval.	Retain copies of all approved plans. Document the number of plans approved annually.	Phase II Water Program Media Manager; NAVFAC CI Division	Continuously		Compliant

MCM	BMP Number	BMP Name	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	PY3 Measurable Goals Progress	PY3 Status of Compliance
4	4.5	Compliance and Enforcement Procedures	Document compliance inspection procedures and enforcement actions.	In permit years 1 through 2, develop the compliance inspection procedures and enforcement actions and conduct quarterly inspections. In permit years 3 through 5, implement these procedures in accordance with the permit requirements.	Retain copies of inspection procedures and enforcement actions.	Phase II Water Program Media Manager	Continuously		Compliant
4	4.6	Tracking and Reporting	Track the number of regulated land-disturbing activities and corresponding information.	In permit years 1 through 2, track the number of land-disturbing activities and total disturbed acreage. In permit years 3 though 5, also track the number of inspections and number and type of enforcement actions.	Track the regulated land-disturbing activities in accordance with Section II of 4.VAC50-60-1240.	Phase II Water Program Media Manager	Continuously		Compliant
5	5.1	Legal Authority	Utilize legal authority to require that stormwater runoff controls are designed and installed in accordance with regulations.	In permit year 1, identify and install legal mechanisms. In permit years 2 through 5, implement these policies and procedures.	Retain copies of documents outlining the policies and procedures.	Phase II Water Program Media Manager	Continuously		Compliant
5	5.2	Inspection, Operation and Maintenance	Require long-term operation and maintenance procedures that include inspection schedules.	In permit year 1, develop operator-owned maintenance and inspection procedures in accordance with Section II of 4.VAC50-60-1240. In permit years 3 through 5, implement these inspection procedures.	Retain operator-owned maintenance and inspection procedures. Retain copies of the inspection reports.	Phase II Water Program Media Manager	Continuously		BMP inspection and maintenance procedures have been developed and inspections are being implemented, but are in the process of developing procedures to ensure BMPs get maintained.
5	5.3	Tracking and Reporting	Maintain an electronic database of all stormwater management facilities.	In permit year 1, update the existing database to include all of the requirements listed in Section II of 4.VAC50-60-1240. In permit years 2 through 5, update the database semi-annually.	Retain a copy of the most current stormwater management facility database.	Phase II Water Program Media Manager	Continuously		Compliant
6	6.1	Written Policies and Procedures	Document policies and procedures to minimize or prevent pollutant discharge from various sources in accordance with Section II of 4.VAC50-60-1240.	In permit years 1 through 2, develop pollution prevention policies and procedures. In permit years 3 through 5, implement these policies and procedures.	Retain copies of the policy and procedural documents.	Phase II Water Program Media Manager	Continuously		Compliant

MCM	BMP Number	BMP Name	BMP Description	Measurable Goals	Metric	Responsible Party	Timeline	PY3 Measurable Goals Progress	PY3 Status of Compliance
6	6.2	SWPPPs	Develop and implement SWPPPs in accordance with Section II of 4.VAC50-60-1240.	In permit year 1, identify the high-priority facilities. In permit years 2 through 4, develop a general SWPPP for these facilities. In permit year 5, implement this SWPPP at each high-priority facility and updated as necessary.	Retain a list of high-priority facilities and a copy of the SWPPP.	Phase II Water Program Media Manager	Continuously		Compliant
6	6.3	Turf and Landscape Nutrient Management	Develop and implement turf and landscape nutrient management plans in accordance with Section II of 4.VAC50-60-1240.	In permit year 1, identify the lands where turf and landscape nutrient management plans are required. In permit years 2 through 5, develop and implement these plans based on the phased approach found in Section II of 4.VAC50-60-1240.	Retain a list of lands requiring turf and landscape nutrient management plans and a copy of each plan.	Phase II Water Program Media Manager	Continuously		Compliant
6	6.4	Training	Provide training in accordance with Section II of 4.VAC50-60-1240 on pollution prevention/good housekeeping to applicable personnel.	In permit year 1, develop a training schedule and program. Also, identify the applicable personnel and generate the training materials. In permit years 2 through 5, implement the training schedule.	Document each training event or ECATTS module. Include the date, number of employees, and training topic.	Phase II Water Program Media Manager	Continuously		Compliant
6	6.5	Tracking and Reporting	Provide annual summary reports on that status of requirements outlined in Section II of 4.VAC50-60-1240.	In permit years 1 through 5, provide a summary report on the development and implementation of daily operational procedures, SWPPPs, and nutrient management plans.	Retain a copy of the three summary reports.	Phase II Water Program Media Manager	Annually		Compliant

Appendix B – MS4 Program Project Execution, MS4 PY3/PY4

MS4 Program Project Execution PY3 and PY4

Project Title/Location: Conceptual Designs for Identified Opportunities to Strengthen Storm Water Management to Comply with E.O. 13508 - Chesapeake Bay Protection and Restoration Hampton Roads Installations

Objective

The objective of this study is to complete the engineering analysis necessary to develop 142 conceptual designs for identified opportunities to strengthen storm water management practices on developed and undeveloped lands at Hampton Roads Installations. (Ongoing)

Project Title/Location: 2015 Municipal Separate Storm Sewer System Construction Site Inspections for Hampton Roads Installations

Objective

The primary objective of this project is to perform an inspection program for all identified regulated land disturbing activities, and for all non-regulated land disturbing activities greater than one acre, which is consistent with the developed written procedures implemented in accordance with the schedule identified in the permit. (Ongoing)

Project Title/Location: 2016 Municipal Separate Storm Sewer System Construction Site Inspections for Hampton Roads Installations

Objective

The primary objective of this project is to perform an inspection program for all identified regulated land disturbing activities, and for all non-regulated land disturbing activities greater than one acre, which is consistent with the developed written procedures implemented in accordance with the schedule identified in the permit. (Awarded but hasn't begun)

Project Title/Location: 2015 Municipal Separate Storm Sewer System Program Implementation for Hampton Roads Installations

Objective

The primary objectives of this project are to conduct engineering analysis for Stormwater BMPs, utilizing the procedures and tracking mechanism, developed under the previous task order and to conduct engineering analysis to develop NMPs for all lands where nutrients are applied to a contiguous area greater than one acre (excluding Golf Courses). In addition, this project includes updates to the BMP database developed under a previous task order. (Project is near completion)

Project Title/Location: 2016 Municipal Separate Storm Sewer System Program Implementation for Hampton Roads Installations

Objective

The primary objective of this project is to perform inspections to all stormwater bmps and to track and update the bmp database with new bmps. (Project execution underway)

Project Title/Location: Non-Chesapeake Bay TMDL Action Plans for Hampton Roads Installations

Objective

The primary objective of this project is to prepare Non-Chesapeake Bay TMDL Action Plans as required by the MS4 permit. (Complete)

Appendix C – ESC Plan and SWM Plan Approval SOPs

DOCUMENT NO.:

HR-SOP-WA-06

TITLE:

Erosion and Sediment Control Plan Guidance for CI Community, Virginia AOR's: Standard Operating Procedures (SOP)

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DOCUMENT OWNER: EV14, MS4 Stormwater Program Manager	AUTHORIZED BY: Director, Water and Wastewater Compliance EV14 8/17/2016 X Phillip S. Winslow, Jr.

REV. NO.	EFFECTIVE DATE	DESCRIPTION OF REVISION
A	07/29/2016	ORIGINAL ISSUE
B	08/09/2016	FINALIZED AND SIGNED
C	08/17/2016	UPDATED AND SIGNED

From: NAVFAC MIDLANT EV14 - Water and Wastewater Compliance

To: NAVFAC MIDLANT Capital Improvements Business Line and Installation Public Works Departments

Subj.: Erosion and Sediment Control Plan Guidance for CI Community, Virginia AOR's – Standard Operating Procedures (SOP)

1. **Purpose:**

An Erosion and Sediment Control Plan shall be developed and submitted to the Virginia Department of Environmental Quality (DEQ) for review and approval for all regulated land disturbing activities greater than or equal to 10,000 square feet in size occurring at any Navy installations and annexes in Virginia. All Erosion and Sediment Control Plans submitted to the State for approval shall comply with the criteria, techniques and methods specified in the Virginia Erosion and Sediment Control Law and Regulations.

The Virginia Erosion and Sediment Control Handbook (VESCH) includes in Chapter 6 guidance detailing E&S Control plan preparation. The VESCH should be utilized as a guidance document for all E&S Control plans that will be prepared and submitted to the Virginia DEQ for approval.

2. **References:**
   - Virginia Erosion and Sediment Control Handbook (VESCH): Chapter 6 (E&S Control plan preparation)

3. **Applicability:**

   This SOP is applicable to all installations in Virginia that fall under the CNRMA-HR EMS. Personnel within the Environmental Business Line Core, Capital Improvements Business Line, and Public Works Departments at Naval Installations within the Hampton Roads Area are responsible for understanding and implementing this SOP.

4. **Action:**

   The following procedures must be followed when preparing an Erosion & Sediment Control Plan Package:

   A. Mailing Submittal Package: E&S Control Plan submittal packages shall be mailed to the Virginia DEQ Office of Stormwater Management; attention Stormwater Plan Review Coordinator. The mailing address is:

   1) Via Postal Mail:
      DEQ
      Office of Stormwater Management, 10th Floor
      Attn: Stormwater Plan Review Coordinator
      PO Box 1105 Richmond, VA 23218

2) Via FedEx or UPS:
   DEQ
   Office of Stormwater Management, 10th Floor
   Attn: Stormwater Plan Review Coordinator
   629 East Main Street
   Richmond, VA 23219

B. *Submittal Packages Contents:* E&S Control Plan submittal packages shall include the following items at minimum:
   1) Transmittal Form (See enclosure #1)
   2) Full Size E&S Control Plan Sheets; folded to 8-1/2 x 11 (2 copies)
   3) Erosion and Sediment Control Narrative, including all required calculations. (2 copies)
   4) Completed copy of E&S Control Plan Checklist found in Chapter 6 of VESCH (See enclosure #2)

C. *Transmittal Form Template:* Use the transmittal form template that is provided as enclosure #1 with this document and submit it along with your E&S plan submittal package. The transmittal template was developed to promote consistency and ensure the required project information is submitted to all applicable parties. Copy Shawn Fluharty of NAVFAC EV Core on submissions to the STATE as the representative for NAVFAC EV, and include half size plan sheets.

   1) ATTN: Mr. Shawn Fluharty
      NAVFAC Mid-Atlantic – Environmental
      1510 Gilbert Street
      Bldg N26, Rm 3208
      Norfolk, Va. 23511

D. *Note to add to E&S Control Plan:* Please ADD the following NOTE to your E/S plan to meet requirements in section 62.1-44.15:55.(B) and Section 62.1-44.15:52 of the E&S law that requires the person responsible for carrying out the plan to certify that he will properly perform the erosion and sediment control measures included in the plan and shall comply with the provisions of this article.

   1) ***ADD NOTE TO E&S CONTROL PLAN***
      "The Contractor selected to complete the regulated land disturbing activity as shown on these drawings is responsible for implementing the approved Erosion and Sediment Control Plan in conjunction with the project specification's. Prior to the commencement of this activity, in accordance with the Va. E&S Control Law, the Contractor shall designate an individual holding a certificate of competency with the State as the person responsible for carrying out the approved plan, and provide the name of this individual to the plan approving authority."

NAVFAC MID-ATLANTIC

LETTER OF TRANSMITTAL Date:

[INSERT ADDRESS]

eProjects Work Order No.: COMPLETE	Job Order No.: COMPLETE
Project Name: COMPLETE	
Location: COMPLETE	
REF: [E&S and/or SWM] Plan Review Submission Package	

NAVFAC Point of Contact
Engineer: COMPLETE
Telephone: COMPLETE
Fax: COMPLETE
Email: COMPLETE

TO Virginia Dept. of Environmental Quality
Office of Stormwater Management
629 East Main Street
Richmond, VA 23219
Telephone: (804) 698-4040
Attention: STORMWATER PLAN REVIEW COORDINATOR

WE ARE SENDING YOU ☒ Attached ☐ Under separate

☐ Plans ☐ Specifications ☐ Calculations ☐ Supporting Documentation

COPIES	DATE	DESCRIPTION

THESE ARE TRANSMITTED as checked below:

☒ For review and approval ☐ For your use ☐ As requested

SPECIAL INSTRUCTIONS:

Please copy all correspondence to the NAVFAC Environmental Compliance Representative at:
1510 Gilbert Street
Bldg N26, Rm 3208
Norfolk, Va. 23511
Phone: (757) 341-0382
Email: Shawn.Fluharty@navy.mil

REMARKS:

COPY TO: Shawn Fluharty, NAVFAC EV

PLAN SUBMITTER'S CHECKLIST

FOR EROSION AND SEDIMENT CONTROL PLANS

Please fill in all blanks and reference the plan sheets/pages where the information may be found, where appropriate, or write N/A by items that are not applicable.

GENERAL

Plan Submission Date _____
Project Name _____
VSMP Permit Number _____
Site Plan Number _____
Site Address _____
Applicant _____ Phone Number _____
Applicant Legal Address _____
Owner _____ Phone Number _____
Principal Designer _____ Phone Number _____
General Contractor _____ Phone Number _____

_____ Complete set of plans- Include all sheets pertaining to the site grading and stormwater and any activities impacting erosion and sediment control and drainage:

- ☐ Existing conditions
- ☐ Demolition
- ☐ Site grading
- ☒ Erosion and sediment control
- ☐ Storm sewer systems
- ☐ Stormwater management facilities
- ☐ Utility layout
- ☐ Landscaping
- ☐ On-site and off-site borrow and disposal areas that do not have separate approved ESC Plans

NA Professional's seal - The designer's original seal, signature, and date are required on the *cover* sheet of each Narrative and each set of Plan Sheets. A facsimile is acceptable for subsequent Plan Sheets.

_____ Number of plan sets - Two sets of ESC Plans should be submitted. The DEQ office will retain all submitted plans.

NA Variances - Variances requested at the time of plan submission are governed by Section 9VAC25-840-50 of the *Virginia Erosion and Sediment Control Regulations*.

NA Certified Responsible Land Disturber (RLD) - A certified RLD is required during all stages of construction, from the initial land disturbance through final site stabilization**. The name of the project RLD must be provided before any land disturbance may begin.** Notify DEQ in a

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

timely manner if the RLD changes during the course of the project.

_NA__ Local Consideration – Plans have been provided to the applicable jurisdictions.

- ☐ Dulles Airport (MWAA)
- ☐ Fairfax County
- ☐ Loudoun County
- ☐ Town of Herndon
- ☐ Dulles Greenway (Trip II)
- ☐ VDOT

CHECKLIST PREPARER

I certify that I am a professional in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia and attendant regulations. By signing this checklist I am certifying that this document and all attachments are, to the best of my knowledge and belief, true, accurate, and complete.

SIGNATURE _____

PRINTED NAME _____

QUALIFICATIONS _____

DATE _____

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

NARRATIVE

Please reference plan sheet numbers where the information may be found.

_____ Project description - Briefly describe the nature and purpose of the land-disturbing activity. Provide the area (acres) to be disturbed.

_____ Existing site conditions - A description of the existing topography (% slopes), ground cover, and drainage (on-site and receiving channels).

_____ Adjacent areas - A description of all neighboring areas such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.

_____ Off-site areas - Describe any off-site land-disturbing activities that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the entity responsible for plan review. Include a statement that any off-site land-disturbing activity associated with the project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.

_____ Soils - Provide a description of the soils on the site, giving such information as soil name, mapping unit, erodibility, permeability, surface runoff, and a *brief* description of depth, texture and soil structure. Show the site location on the Soil Survey, if it is available. Include a plan showing the boundaries of each soil type on the development site.

_____ Critical areas - A description of areas on the site that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, watercourses, wet weather / underground springs, etc.).

_____ Erosion and sediment control measures - A description of the structural and vegetative methods that will be used to control erosion and sedimentation on the site. Controls should satisfy applicable minimum standards and specifications in Chapter 3 of the 1992 *Virginia Erosion and Sediment Control Handbook* (VESCH) or more stringent local requirements.

_____ Management strategies / Sequence of construction - Address management strategies, the sequence of construction, and any phasing of installation of ESC measures.

_____ Permanent stabilization - A brief description, including specifications, of how the site will be stabilized after construction is completed.

_____ Maintenance of ESC measures - A schedule of regular inspections, maintenance, and repair of erosion and sediment control structures should be set forth.

NA___ Calculations for temporary erosion and sediment control measures - For each temporary ESC measure, provide the calculations required by the standards and specifications.

_____ Stormwater management considerations - Will the development of the site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff, including during construction.

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

_____ Specifications / Detail Drawings for erosion and sediment control measures - For each erosion and sediment control measure employed in the plan, include, at a minimum, the detail from the standard and specification in the VESCH or more stringent local requirements. Include any approved variances or revisions to the standards and specifications.

NA___ Specifications for stormwater and stormwater management structures - Provide specifications for stormwater and stormwater management structures, i.e., pipe materials, pipe bedding, stormwater structures.

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

SITE PLAN

Please reference plan sheet numbers where the information may be found.

_____ Vicinity map - A small map locating the site in relation to the surrounding area. Include any landmarks that might assist in locating the site.

_____ Indicate north - The direction of north in relation to the site.

_____ Off-site areas - Include any off-site land-disturbing activities (e.g., borrow sites, disposal areas, etc.) not covered by a separate approved ESC Plan.

_____ Legend - Provide a complete listing of all ESC measures used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.

_____ Property lines and easements - Show all property and easement lines. For each adjacent property, list the deed book and page number and the property owner's name and address.

_____ Existing vegetation – Show the existing tree lines, grassed areas, or unique vegetation.

_____ Limits of clearing and grading – Delineate all areas that are to be cleared and graded.

_____ Protection of areas not being cleared - Fencing or other measures to protect areas that are not to be disturbed on the site.

_____ Critical areas – Note all critical areas on the plan.

_____ Existing contours – Show the existing contours of the site.

_____ Final contours and elevations – Show changes to the existing contours, including final drainage patterns.

_____ Site development – Show all improvements such as buildings, parking lots, access roads, utility construction, etc. Show all physical items that could affect or be affected by erosion, sediment, and drainage.

_____ Location of practices - The locations of erosion and sediment control and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of the VESCH.

_____ Adequate Conveyances – Ensure that stormwater conveyances with adequate capacity and adequate erosion resistance have been for provided all on-site concentrated stormwater runoff. Off-site channels that receive runoff from the site, including those receiving runoff from stormwater management facilities, must be adequate. Increased volumes of sheet flows must be diverted to a stable outlet, adequate channel, pipe or pipe system, or a stormwater management facility.

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

☐ Provide exhibits showing the drainage divides, the direction of flow, and the size (acreage) of each of the site drainage areas that discharge runoff off-site, both existing and proposed.
☐ Provide calculations for pre- and post-development runoff from these drainage areas.
☐ Ensure that Minimum Standard 19 is satisfied for each off-site receiving channel, including those that receive runoff from stormwater management facilities.
☐ Provide calculations for the design of each permanent stormwater management facility.
☐ Ensure that increased volumes of sheet flows are diverted to a stable outlet, to an adequate channel, pipe or pipe system, or to a stormwater management facility.
☐ Provide adequacy calculations for all on-site stormwater conveyances.

_____ Calculations for permanent stormwater conveyances - For each permanent stormwater conveyance or structure, provide the following design calculations, as applicable:

☐ Drainage area map with time of concentration (T_C) path shown
☐ T_C calculation/nomograph
☐ Locality IDF curve
☐ Composite runoff coefficient or RCN calculation
☐ Peak runoff calculations
☐ Stormwater conveyance channel design calculations
☐ Storm drain and storm sewer system design calculations
☐ Hydraulic Grade Line if any pipe in the system is more than 90% full for a 10-year storm
☐ Culvert design calculations
☐ Drop inlet backwater calculations
☐ Curb inlet length calculations

_____ Direction of Flow for Conveyances - Indicate the direction of flow for all stormwater conveyances (storm drains, stormwater conveyance channels).

_____ Storm Drain Profiles - Provide profiles of all storm drains except roof drains. If the type of pipe (RCP, CMP, HDPE, etc.) is not called out on the profiles, then the most conservative pipe material that may be specified for the project must be used in the adequacy calculations.

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

MINIMUM STANDARDS
Plan Sheet #

_____ **Minimum Standards - All Minimum Standards must be addressed.**

Yes No NA

[] [] [] MS-1 Have temporary and permanent stabilization been addressed in the narrative?
[] [] [] Are practices shown on the plan?
[] [] [] Temporary and permanent seed specifications?
[] [] [] Lime and fertilizer?
[] [] [] Mulching?
[] [] [] Blankets/Matting?
[] [] [] Pavement/Construction Road Stabilization?

[] [] [] MS-2 Has stabilization of soil stockpiles, borrow areas, and disposal areas been addressed in the narrative and on the plan?
[] [] [] Have sediment trapping measures been provided?

[] [] [] MS-3 Has the establishment and maintenance of permanent vegetative stabilization been addressed?

[] [] [] MS-4 Does the plan specifically state that sediment-trapping facilities shall be constructed as a first step in land-disturbing activities?

[] [] [] MS-5 Does the plan specifically state that stabilization of earthen structures is required immediately after installation? Is this noted for each measure on the plan?

[] [] [] MS-6 Are sediment traps and sediment basins specified where needed and designed to the standard and specification?

[] [] [] MS-7 Have the design and temporary/permanent stabilization of cut and fill slopes been adequately addressed? Is Surface Roughening provided for slopes steeper than 3:1?

[] [] [] MS-8 Have adequate temporary or permanent conveyances (paved flumes, channels, slope drains) been provided for concentrated stormwater runoff on cut and fill slopes?

[] [] [] MS-9 Has water seeping from a slope face been addressed (e.g., subsurface drains)?

[] [] [] MS-10 Is adequate inlet protection provided for all operational storm drain and culvert inlets?

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

Yes No NA

[] [] [] MS-11 Are adequate outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels? Is there a schedule indicating:
[] [] [] Dimensions of the outlet protection? Lining? Size of riprap?
[] [] [] Cross section and slope of the channels? Type of lining? Size of riprap, if used?

[] [] [] MS-12 Are in-stream protection measures required so that channel impacts are minimized?

[] [] [] MS-13 Are temporary stream crossings of non-erodible material required where applicable?

[] [] [] MS-14 Are all applicable federal, state and local regulations pertaining to working in or crossing live watercourses being followed?

[] [] [] MS-15 Has immediate restabilization of areas subject to in-stream construction (bed and banks) been adequately addressed?

[] [] [] MS-16 Have disturbances from underground utility line installations been addressed?
[] [] [] No more than 500 linear feet of trench open at one time?
[] [] [] Effluent from dewatering filtered or passed through a sediment-trapping device?
[] [] [] Proper backfill, compaction, and restabilization?

[] [] [] MS-17 Is the transport of soil and mud onto public roadways properly controlled? (i.e., Construction Entrances, wash racks, transport of sediment to a trapping facility, cleaning of roadways at the end of each day, no washing before sweeping and shoveling)

[] [] [] MS-18 Has the removal of temporary practices been addressed?
[] [] [] Have the removal of accumulated sediment and the final stabilization of the resulting disturbed areas been addressed?

[] [] [] MS-19 Are properties and waterways downstream from development adequately protected from sediment deposition, erosion, and damage due to increases in volume, velocity and peak flow rate of stormwater runoff? Have adequate channels been provided on-site?

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

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IT IS THE USER'S RESPONSIBILITY TO VERIFY *THE PRINTED COPY AGAINST THE CURRENT CONTROLLED DOCUMENT, WHICH IS MAINTAINED ELECTRONICALLY.*

DOCUMENT NO.:

HR-SOP-WA-07

TITLE:

Stormwater Management Plan Guidance for CI Community, Virginia AOR's– Standard Operating Procedures (SOP)

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DOCUMENT OWNER: EV14, MS4 Stormwater Program Manager	AUTHORIZED BY: Director, Water and Wastewater Compliance EV14 8/17/2016 X Phillip S. Winslow, Jr.

Signed by: WINSLOW.PHILLIP.S.JR.1395793531

REV. NO.	EFFECTIVE DATE	DESCRIPTION OF REVISION
A	07/29/2016	ORIGINAL ISSUE
B	08/09/2016	FINALIZED AND SIGNED
C	08/17/2016	UPDATED AND SIGNED.

From: NAVFAC MIDLANT EV14 - Water and Wastewater Compliance

To: NAVFAC MIDLANT Capital Improvements Business Line and Installation Public Works Departments

Subj.: Stormwater Management Plan Guidance for CI Community, Virginia AOR's – Standard Operating Procedures (SOP)

1. **Purpose:**
A Stormwater Management Plan shall be developed and submitted to the Virginia Department of Environmental Quality (DEQ) for review and approval for all regulated land disturbing activities greater than or equal to 1 acre in size occurring at any Navy installations and annexes in Virginia. All Stormwater Management Plans submitted to the State for approval shall comply with the criteria, techniques and methods specified in the Virginia Stormwater Management Law and Regulations.

2. **References:**
   - Virginia Stormwater Management Act, Virginia Stormwater Management Program Regulations and General VPDES Permit for Discharges of Stormwater from Construction Activities Regulations

3. **Applicability:**
This SOP is applicable to all installations in Virginia that fall under the CNRMA-HR EMS. Personnel within the Environmental Business Line Core, Capital Improvements Business Line, and Public Works Departments at Naval Installations within the Hampton Roads Area are responsible for understanding and implementing this SOP.

4. **Action:**
The following procedures must be followed when preparing a Stormwater Management Plan:

   A. *Mailing Submittal Packages:* Stormwater Management Plan submittal packages shall be mailed to the Virginia DEQ Office of Stormwater Management; attention Stormwater Plan Review Coordinator. The mailing address is:

      1) Via Postal Mail:
      DEQ
      Office of Stormwater Management, 10th Floor
      Attn: Stormwater Plan Review Coordinator
      PO Box 1105 Richmond, VA 23218

      2) Via FedEx or UPS:
      DEQ
      Office of Stormwater Management, 10th Floor
      Attn: Stormwater Plan Review Coordinator
      629 East Main Street
      Richmond, VA 23219

B. *Submittal Packages Contents:* Stormwater Management Plan submittal packages shall include the following items at minimum:
   1) Transmittal form (See enclosure #1)
   2) Full Size SWM Plan Sheets; folded to 8-1/2 x 11 (2 copies)
   3) SWM plan supporting calculations. (2 copies)
   4) Completed copy of SWM Plan Submittal Checklist (See enclosure #2)
   5) VAR10 Construction Stormwater General Permit Registration Statement. (See C. below)

C. *VAR10 Construction Stormwater General Permit Registration Statement:* The Virginia Department of Environmental Quality requires that the VAR10 Registration Statement be included with SWM plan submittal packages. **ONLY** items **2-10** on the registration statement are to be filled in for this submittal to the STATE. Items 1 and 12 on the form shall only be completed by the Construction Activity Operator and re-submitted to the STATE prior to commencement of land disturbance. (enclosure #3)

D. *Transmittal Form:* Use the Transmittal form template that is provided as enclosure #1 with this SOP and submit it along with the SWM plan package. The transmittal form was developed to promote consistency and ensure the required project information is submitted to all applicable parties.

   Copy Shawn Fluharty of NAVFAC EV Core on submissions to the STATE as the representative for NAVFAC EV, and include half size plan sheets.

   1) ATTN: Mr. Shawn Fluharty
      NAVFAC Mid-Atlantic – Environmental
      1510 Gilbert Street
      Bldg N26, Rm 3208
      Norfolk, Va. 23511

NAVFAC MID-ATLANTIC

LETTER OF TRANSMITTAL Date:

[INSERT ADDRESS]

eProjects Work Order No.: COMPLETE	Job Order No.: COMPLETE
Project Name: COMPLETE	
Location: COMPLETE	
REF: [E&S and/or SWM] Plan Review Submission Package	

NAVFAC Point of Contact
Engineer: COMPLETE
Telephone: COMPLETE
Fax: COMPLETE
Email: COMPLETE

TO Virginia Dept. of Environmental Quality
Office of Stormwater Management
629 East Main Street
Richmond, VA 23219
Telephone: (804) 698-4040
Attention: STORMWATER PLAN REVIEW COORDINATOR

WE ARE SENDING YOU ☒ Attached ☐ Under separate

☐ Plans ☐ Specifications ☐ Calculations ☐ Supporting Documentation

COPIES	DATE	DESCRIPTION

THESE ARE TRANSMITTED as checked below:

☒ For review and approval ☐ For your use ☐ As requested

SPECIAL INSTRUCTIONS:

Please copy all correspondence to the NAVFAC Environmental Compliance Representative at:
1510 Gilbert Street
Bldg N26, Rm 3208
Norfolk, Va. 23511
Phone: (757) 341-0382
Email: Shawn.Fluharty@navy.mil

REMARKS:

COPY TO: Shawn Fluharty, NAVFAC EV

PLAN SUBMITTER'S CHECKLIST

FOR STORMWATER MANAGEMENT PLANS

Please fill in all blanks and **please reference the plan sheets/pages where the information may be found,** where appropriate, or write N/A by items that are not applicable.

GENERAL

Plan Submission Date _____
Project Name _____
VSMP Permit Number _____
Site Plan Number _____
Site Address _____
Applicant _____ Phone Number _____
Applicant Legal Address _____
Owner _____ Phone Number _____
Owner E-mail Address _____
Principal Designer _____ Phone Number _____
Principal Designer E-mail Address _____
Total Disturbed Area Figure _____

__NA__ Professional's seal - The designer's original seal, signature, and date are required on the *cover* sheet of each Narrative and each set of Plan Sheets. A facsimile is acceptable for subsequent Plan Sheets.

_____ Number of plan sets – Attach two sets of SWM Plans.

_____ Exceptions - Exceptions requested are governed by Section 9VAC25-870-57 of the *Virginia Stormwater Management Regulations*.

_____ Local Consideration – Provide contact information for the locality's plan review coordinator.

Name _____ Phone Number _____
Address _____

_____ Grandfathering - Attach supporting documentation consistent with the requirements of Section 9VAC25-870-48 of the *Virginia Stormwater Management Regulations*.

_____ Offsite Compliance – Attach letter of availability from the off-site provider as governed by Section 9VAC25-870-55 of the *Virginia Stormwater Management Regulations*.

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

CHECKLIST PREPARER

I certify that I am a professional in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia and attendant regulations. By signing this checklist I am certifying that this document and all attachments are, to the best of my knowledge and belief, true, accurate, and complete.

SIGNATURE _____

PRINTED NAME _____

QUALIFICATIONS _____

DATE _____

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

SITE PLANS

Please reference the plan sheet numbers where specific information may be found in the blanks below.

_____ Common address and legal description of the site, including the tax reference number(s) and parcel number(s) of the property or properties affected.

_____ A narrative that includes a description of current site conditions and proposed development and final site conditions, including proposed use of environmental site design techniques and practices, stormwater control measures, relevant information pertaining to long-term maintenance of these measures, and a construction schedule.

_____ Existing and proposed mapping and plans (recommended scale of 1" = 50', or greater detail), which illustrates the following at a minimum:

☐ North arrow
☐ Legend
☐ Vicinity map
☐ Existing and proposed topography (minimum of 2-foot contours recommended)
☐ Property lines
☐ Perennial and intermittent streams
☐ Mapping of predominant soils from USDA soils surveys as well as the location of any site-specific test bore hole investigations that may have been conducted and information identifying the hydrologic characteristics and structural properties of soils used in the installation of stormwater management facilities
☐ Boundaries of existing predominant vegetation and proposed limits of clearing and grading
☐ Location and boundaries of natural feature protection and conservation areas (e.g.,wetlands, lakes, ponds, aquifers, public drinking water supplies, etc.) and applicable setbacks (e.g., stream buffers, drinking water well setbacks, septic drainfield setbacks, building setbacks, etc.)
☐ Identification of any on-site or adjacent water bodies included on the Virginia 303(d) list of impaired waters
☐ Current land use and location of existing and proposed roads, buildings, parking lots and other impervious areas
☐ Location and description of any planned demolition of existing structures, roads, etc.
☐ Proposed land use(s) with a tabulation of the percentage of surface area to be adapted to various uses, including but not limited to planned locations of utilities, roads, parking lots, stormwater management facilities, and easements
☐ Location of existing and proposed utilities [e.g., water (including wells), sewer (including septic systems), gas, electric, telecommunications, cable TV, etc.] and easements
☐ Earthwork specifications
☐ Show the BMP name, **geographic coordinates** and design of both structural and non-structural stormwater control measures, including maintenance access and limits of disturbance
☐ Storm drainage plans for site areas not draining to any BMP(s)
☐ Location of existing and proposed conveyance systems, such as storm drains, inlets, catch basins, channels, lateral groundwater movement interceptors (French drains, agric. tile drains, etc.), swales, and areas of overland flow, including grades, dimensions, and direction of flow
☐ Final drainage patterns and flow paths
☐ Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainage systems

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

☐ Location of all contributing drainage areas and points of stormwater discharge, receiving surface waters or karst features into which stormwater discharges, the pre-development and post-development conditions for drainage areas, and the potential impacts of site stormwater on adjoining parcels
☐ Location and dimensions of proposed channel modifications, such as bridge or culvert crossings
☐ Final stabilization and landscaping plans

_____ Hydrologic and hydraulic analysis, including the following:

☐ Site map with locations of design points and drainage areas (size in acres) for runoff calculations
☐ Identification and calculation of stormwater site design credits, if any apply
☐ Summary description of the water quantity and water quality compliance strategy.
☐ Time of concentration (and associated flow paths)
☐ Imperviousness of the entire site and each drainage area
☐ NRCS runoff curve numbers or volumetric runoff coefficients
☐ A hydrologic analysis for the existing (pre-development) conditions, including runoff rates, volumes, and velocities, showing the methodologies used and supporting calculations
☐ A hydrologic analysis for the proposed (post-development) conditions, including runoff rates, volumes, and velocities, showing the methodologies used and supporting calculations
☐ Hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms
☐ Pollution load and load reduction requirements and calculations
☐ Final good engineering and sizing calculations for stormwater control measures, including contributing drainage areas, storage, and outlet configurations, verifying compliance with the water quality and water quantity requirements of the regulations
☐ Stage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities
☐ Final analysis of the potential downstream impacts/effects of the project, where necessary
☐ Downstream analysis, where detention is proposed
☐ Dam safety and breach analysis, where necessary

_____ Representative cross-section and profile drawings and details of stormwater control measures and conveyances which include the following:
☐ Existing and proposed structural elevations (e.g., inverts of pipes, manholes, etc.)
☐ Design water surface elevations
☐ Structural details of BMP designs, outlet structures, embankments, spillways, grade control structures, conveyance channels, etc.

_____ Applicable construction and material specifications, including references to applicable material and construction standards (ASTM, etc.)

_____ Landscaping plans for stormwater control measures and any site reforestation or revegetation

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

_____ Long term operations and maintenance plan/agreement as governed by 9VAC25-870-112 of the Virginia Stormwater Management Program Regulations.

_____ Evidence of acquisition of all applicable local and non-local permits

_____ Waiver/exception requests

_____ Evidence of acquisition of all necessary legal agreements (e.g., easements, covenants, land trusts, etc.)

_____ Applicable supporting documents and studies (e.g., infiltration tests, geotechnical investigations, TMDLs, flood studies, etc.)

Yes Other required permits: Erosion & Sediment Control Plan

PROJECT NAME: _____ SUBMITTAL#: _____

PLANS DATED: _____

Registration Statement
General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10)

(Please Type or Print All Information)

1. **Construction Activity Operator:** *(General permit coverage will be issued to this operator. The Certification in Item #12 must be signed by the appropriate person associated with this operator.)*

   Name:_____

   Contact:_____

   Mailing Address:_____

   City:_____ State:_____ Zip:_____ Phone:_____

   Email address (if available):_____

   Indicate if DEQ may transmit general permit correspondence electronically: Yes ☐ No ☐

2. **Existing General Permit Registration Number (for renewals only):**_____

3. **Name and Location of the Construction Activity:**

   Name:_____

   Address (if available):_____

   City:_____ State:_____ Zip:_____

   County (if not located within a City):_____

   Latitude (decimal degrees):_____ Longitude (decimal degrees):_____

   Name and Location of all Off-site Support Activities to be covered under the general permit:

   Name:_____

   Address (if available):_____

   City:_____ State:_____ Zip:_____

   County (if not located within a City):_____

   Latitude (decimal degrees):_____ Longitude (decimal degrees):_____

4. **Status of the Construction Activity (check only one):** Federal ☐ State ☐ Public ☐ Private ☐

5. **Nature of the Construction Activity (e.g., commercial, industrial, residential, agricultural, oil and gas, etc.):**

   _____

6. **Name of the Receiving Water(s) and Hydrologic Unit Code (HUC):**

   Name:_____ Name:_____

   HUC:_____ HUC:_____

7. **If the discharge is through a Municipal Separate Storm Sewer System (MS4), the name of the MS4 operator:**

   _____

8. **Estimated Project Start and Completion Date:**

   Start Date (mm/dd/yyyy):_____ Completion Date (mm/dd/yyyy):_____

9. **Total Land Area of Development (to the nearest one-hundredth acre):**_____

   Estimated Area to be Disturbed (to the nearest one-hundredth acre):_____

10. **Is the area to be disturbed part of a larger common plan of development or sale?** Yes ☐ No ☐

11. **A stormwater pollution prevention plan (SWPPP) must be prepared in accordance with the requirements of the General VPDES Permit for Discharges of Stormwater from Construction Activities <u>prior to</u> submitting this Registration Statement. By signing this Registration Statement the operator is certifying that the SWPPP has been prepared.**

12. **Certification:** "I certify under penalty of law that I have read and understand this Registration Statement and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

    Printed Name:_____ Title:_____

    Signature:_____ Date:_____

    (Please sign in INK. This Certification must be signed by the appropriate person associated with the operator identified in Item #1.)

Instructions for Completing the Registration Statement
General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10)

GENERAL

A. Coverage Under this General Permit.

Any operator applying for coverage under this general permit who is required to submit a Registration Statement (see Section B below) must submit a complete Registration Statement to the Department. The Registration Statement serves as a Notice of Intent for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10).

B. Single-family Detached Residential Structures.

Operators with an existing stormwater discharge or proposing a new stormwater discharge associated with the construction of a single-family detached residential structure are not required to submit a Registration Statement or the Department of Environmental Quality (DEQ) portion of the general permit fee.

Operators of these types of discharges are authorized to discharge under this general permit immediately upon the general permit's effective date of July 1, 2014.

C. To Apply for Permit Coverage.

1. New Construction Activities. Any operator proposing a new stormwater discharge from construction activities shall submit a complete Registration Statement to the Department prior to the commencement of land disturbance, unless exempted by Section B above. Any operator proposing a new stormwater discharge from construction activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment is immediately authorized to discharge under this general permit and must submit a complete Registration Statement to the Department no later than 30 days after commencing land disturbance; documentation to substantiate the occurrence of the public emergency must accompany the Registration Statement.

2. Existing Construction Activities. Any operator that was authorized to discharge under the general permit issued in 2009, and who intends to continue coverage under this general permit, shall submit a complete Registration Statement to the Department on or before June 1, 2014, unless exempted by Section B above.

D. Where to Submit Registration Statements.

All Registration Statements should be submitted to:

Department of Environmental Quality
Office of Stormwater Management, 10th Floor
P.O. Box 1105
Richmond, VA 23218

LINE-BY-LINE INSTRUCTIONS

Item 1: Construction Activity Operator Information.

"Operator" means the owner or operator of any facility or activity subject to the Stormwater Management Act and regulations. In the context of stormwater associated with a large or small construction activity, operator means any person associated with a construction project that meets either of the following two criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other state permit or VSMP authority permit conditions (i.e., they are authorized to direct workers at a site to carry out activities required by the stormwater pollution prevention plan or comply with other permit conditions).

The entities that are considered operators will commonly consist of the owner or developer of a project (the party with control of project plans and specifications) or the general contractor (the party with day to day operational control of the activities at the project site which are necessary to ensure compliance with the general permit).

Provide the legal name (do not use a colloquial name), contact, mailing address, telephone number, and email address (if available) of the construction activity operator; general permit coverage will be issued to this operator. Indicate if the Department may transmit general permit correspondence electronically.

Item 2: Existing General Permit Registration Number.

For reapplications only, provide the existing general permit registration number for the construction activity. This item does not need to be completed for new construction activities applying for general permit coverage.

Item 3: Name and Location of the Construction Activity Information.

Provide the official name, street address (if available), city or county (if not located within a City) of the construction activity. Also, provide the latitude and longitude in decimal degrees of the approximate center of the construction activity (e.g., N 37.5000, W 77.5000).

Name and Location of Off-site Support Activity Information.

This general permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) located on-site or off-site provided that (i) the support activity is directly related to a construction activity that is required to have general permit coverage; (ii) the support activity is not a commercial operation, nor does it serve multiple unrelated construction activities by different operators; (iii) the support activity does not operate beyond the completion of the construction activity it supports; (iv) the support activity is identified in the registration statement at the time of general permit coverage; (v) appropriate control measures are identified in a SWPPP and implemented to address the discharges from the support activity areas; and (vi) all applicable state, federal, and local approvals are obtained for the support activity.

Provide the official name, street address (if available), City and County (if not located within a City) of all off-site support activities to be covered under this general permit. Also, provide the latitude and longitude in decimal degrees of the approximate center of the off-site support activities (e.g., N 37.5000, W 77.5000). Also, if an off-site support activity is going to be covered under this general permit the total land area of the off-site support activity and the estimated area to be disturbed by the off-site support activity need to be included in Item #9.

Item 4: Status of the Construction Activity.

Indicate the appropriate status (Federal, State, Public, or Private) of the construction activity.

Item 5: Nature of the Construction Activity.

Provide a brief description of the construction activity, such as commercial, residential, agricultural, oil and gas, etc. This list is not all inclusive.

Item 6: Receiving Waters(s) and HUC Information.

Provide the name of the receiving water(s) and corresponding HUC for all stormwater discharges including any stormwater discharges from off-site support activities to be covered under this general permit. Hydrologic Unit Code or HUC is a watershed unit established in the most recent version of Virginia's 6th order national watershed boundary dataset.

Item 7: MS4 Information.

If stormwater is discharged through a municipal separate storm sewer system (MS4), provide the name of the MS4 operator. The name of the MS4 operator is generally the Town, City, County, Institute or Federal facility where the construction activity is located.

Item 8: Construction Activity Start and Completion Date Information.

Provide the estimated start date (month/day/year) of the construction activity. Provide the estimated completion date (month/day/year) of the construction activity.

Item 9: Construction Activity Area Information.

Provide the total area (to the nearest one-hundredth acre) of the development (i.e.., the total acreage of the larger common plan of development or sale). Include the total acreage of any off-site support activity to be covered under this general permit.

Provide the estimated area (to the nearest one-hundredth acre) to be disturbed by the construction activity. Include the estimated area of land disturbance that will occur at any off-site support activity to be covered under this general permit.

Item 10: Common Plan of Development or Sale Information.

Indicate if the area to be disturbed by the construction activity is part of a larger common plan of development or sale. Larger common plan of development or sale is defined as a contiguous area where separate and distinct construction may be taking place at different times on different schedules. Plan is broadly defined as any announcement or documentation, including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, etc., or physical demarcation such as boundary signs, lot stakes, or surveyor markings indicating that construction activities may occur.

Item 11: Stormwater Pollution Prevention Plan (SWPPP).

A Stormwater Pollution Prevention Plan (SWPPP) must be prepared in accordance with the requirements of the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10) prior to submitting this Registration Statement. By signing this Registration Statement the operator is certifying that the SWPPP has been prepared.

Item 12: Certification.

A properly authorized individual associated with the operator identified in Item 1 of the Registration Statement is responsible for certifying and signing the Registration Statement. **Please sign the Registration Statement in INK.**

State statutes provide for severe penalties for submitting false information on the Registration Statement. State regulations require that the Registration Statement be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this part, a responsible corporate officer means:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or

(ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this part, a principal executive officer of a public agency includes:

(i) The chief executive officer of the agency, or

(ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Appendix D – NASO TMDL Action Plan Implementation

Primary Bacteria Reducing BMPs

Management Practices- Primary BMPs (with direct impact on bacteria load reduction)
N40080-11-D-0499; WE68
Project Title: NAS Oceana Local TMDL Action Plan

Mgmt Practice Number	Mgmt Practice Name	Management Practice Description	Measurable Goals	Metric	Responsible Party	Schedule (including interim milestones)	Progress
1	Manure Handling and Disposal	Discontinue current land application of livestock manure and collect in a covered roll-off bin and haul offsite. Stop land application of manure.	Collect all manure from the confined animal areas including the: 1) stables; 2) riding ring; and 3) petting zoo. Maintain records of number of livestock at NAS Oceana. Investigate feasiblity of collecting manure from pastures and riding trails.	Record and report the number of livestock present at NAS Oceana from which manure was collected.	Phase II Water Program Media Manager and Installation Water Program Media Manager	By 2017, stop current land application at the stables and collect all manure from confined areas (stables, riding ring, petting zoo). By 2018, determine need and feasibility of collecting waste from pastures and trails.	Held a meeting on July 14, 2016 to inform Stables they would have to begin collecting and disposing of manure instead of land applying. Stables Manager currently looking into dipsosal options.
2	NAS Oceana Stables Nutrient Management Plan	Follow the guidance regarding manure management found in the Stables Nutrient Management Plan and provide training/outreach to Stable employees.	Ensure that the manure management recommendations in the Nutrient Management Plan are followed.	Document methods used to manage the manure at NAS Oceana stable and pastures.	Phase II Water Program Media Manager	Continuously ensure that the manure management guidance for the horse stable and pastures is followed.	Held a meeting on July 14, 2016 to inform Stables they would have to begin collecting and disposing of manure instead of land applying. Stables Manager currently looking into dipsosal options .The pasture-generated manure piles are broken up and spread evenly by dragging a chain harrow across pastures on a weekly basis which promotes uniform grazing, decomposition, rapid drying and minimizes stress to vegetation under piles. The horses are also rotated between pastures.

Primary Bacteria Reducing BMPs

Mgmt Practice Number	Mgmt Practice Name	Management Practice Description	Measurable Goals	Metric	Responsible Party	Schedule (including interim milestones)	Progress
3	Biosolids	Limit the amount of biosolids applied in the agricultural fields, if necessary.	Investigate the amount of biosolids used on the agricultural fields and the impact on the high P levels in the fields.	Document the current biosolid application procedures.	Phase II Water Program Media Manager	By July 2016, quantify the amount of biosolids applied to the agricultural fields and document the timing of the application. By July 2017, explore modifying Ag leases to prohibit the use of biosolids.	No biosolids have been applied to any of the fields at Oceana for over five years. The only time biosolids can be applied is when there are no crops in the fields. The HRSD biosolids contractor is required to take soil samples before the biosolids are applied to the fields, and they only apply lime to fields to maintain a pH of about 6.5. We are inquiring about modifying the Ag leases to prohibit the use of biosolids.
4	Wildlife Controls	Update the Wildlife Control Program to control wildlife populations, if necessary.	Review the current program to control wildlife populations and assess the program's effectiveness (including if the program recommendations are in practice and if any updates to the program are required.)	Document the findings regarding the review of the current wildlife control program. Identify any required updates. Monitor deer and other populations to see if numbers and associated loads are reduced.	Phase II Water Program Media Manager	By July 2016, determine if any updates are required to the wildlife control program. By July 2017, update and implement the program.	At this time, no updates are necessary. Wildlife is actively being controlled and populations have been significantly reduced since 2010.
5	Illicit Discharge and Detection	Develop and implement written procedures to detect, identify, and eliminate illicit discharges in accordance with Section II of 4VAC50-60-1240.	Finalize draft procedures to detect, identify and eliminate illicit discharges. These procedures will likely be identified as Standard Operating Procedures (SOP). Implement these final procedures.	Document the number of outfalls screened, the screening results, and other pertinent details. Document each investigation into a suspected illicit discharge. All reporting shall be in accordance with Section II of 4VAC50-60-1240.	Phase II Water Program Media Manager	By July 2016, finalize the draft procedures to detect, identify and eliminate illicit discharges. Begin implementation of these procedures by July 2017.	In progress (in process of being finalized)

Primary Bacteria Reducing BMPs

Mgmt Practice Number	Mgmt Practice Name	Management Practice Description	Measurable Goals	Metric	Responsible Party	Schedule (including interim milestones)	Progress
6	Horse Washing Procedures	Follow appropriate procedures for horse washing to prevent stormwater runoff into the storm system.	Wash the horses in an area away from the storm drains to encourage the infiltration of the wash water into the ground (and prevent from entering the storm system).	Document the procedures.	Phase II Water Program Media Manager and Installation Water Program Media Manager	Continuously ensure that appropriate horse washing procedures are followed.	Confirmed with Stables Manager that horse washing is currently being conducted in an area with no direct discharge to storm.
7	Evaluation and Assessment	Evaluation and Assessment	Annually evaluate and assess the effectiveness of manure removal from the watershed. Determine if additional manure removal from the unconfined areas such as the pastures and riding trails is warranted. Also determine if the application of biosolids should be restricted in the agricultural land leases.	In permit years 1 through 5, on an annual basis, estimate the amount of bacteria diverted from the watershed from the collection of the confined animal waste (including the stables, riding ring and petting zoo). If additional removal from the unconfined areas (pastures and riding trails) is deemed appropriate, add this amount for a total amount of bacteria (and nutrients) diverted. Also if the elimination of biosolids application is deemed appropriate, add this amount for a total amount of bacteria (and nutrients) diverted. Monitor deer and other populations to see if numbers and associated loads are reduced.	Phase II Water Program Media Manager	Annually	Collection of manure from confined areas (stables, riding ring, petting zoo) and land application is still currently being performed. Stables Manager currently looking into dipsosal options for manure. Stables should stop land applying and collect all manure from confined areas (stables, riding ring, petting zoo) by 2017. We will provide an update for the application or elimination of biosolids and an update for the wildlife control program during the next reporting period.

Appendix E – Supporting Documentation for Public Participation Events

Supporting Documentation for Public Participation Events

2016 Clean the Bay Day

The 28th Annual Clean the Bay Day event occurred from June 2nd through June 4th 2016. Eleven bases participated in this year's event (see below for list of installations). The event was included in the Installation's Plan of the Week (distributed to all personnel informing them of upcoming events). At least 919 volunteers participated. The volunteers cleaned 72.01 miles of beach and bay shoreline and picked up 48,830 lbs. of trash. The most commonly found items were plastic bags, bottles (plastic and glass), cans, nets, tires, license plates, buckets and cigarette butts. Some of the unusual items found by our volunteers included a 1951 Plymouth Concord, entire piece of a pier, visor, flip flop, tackle box, roll of tar paper, 2 mattresses, railroad ties, ceramic street light, 1960 Pepsi bottle worth $35, crab pots and a stuffed bear with a mardi gras beaded necklace.

NASO and Dam Neck Annex - June 4th
Fort Story -June 3rd
JEB Little Creek - June 3rd
NSA Hampton Roads - June 3rd
Naval Station Norfolk - June 4th
Norfolk Navy Shipyard (includes Portsmouth Annexes) – June 3rd
Naval Medical Center Portsmouth – June 3rd
NWS Yorktown & Cheatham Annex - June 3rd
Lafayette River Annex – June 2nd

2016 Earth Day Outreach Project

The Navy partnered with local citizens, City of Norfolk, Elizabeth River Project and the Lafayette Wetlands Partnership in an Earth Day Outreach Project to restore a wetland at Knitting Mill Creek on Mayflower Road (between New Jersey Ave. and Connecticut Ave.) in Norfolk on April 19th and 23rd 2016. Numerous volunteers (both civilian and military) participated in the event. Work involved preparing the ground to create a planting bed for high marsh grasses and upland shrubs. The work will also include the placement or spreading of the pathway materials: crushed clam shell, stone, and pervious pavers.

Naval Station Norfolk's Clean the Station Day

Naval Station Norfolk's Clean the Station Day occurred on October 16, 2015. This joint effort between Fleet and Tenant Commands as well as Civilian personnel focuses on cleaning up several locations throughout Naval Station Norfolk. The efforts involved collecting trash, removing dead branches and debris, sweeping, clearing parking lots and general landscaping. Many of the common areas were concentrated on including parade grounds, running trails, areas outside the access gates and shoreline.

2016 Environment Virginia Symposium

The Navy attended and networked with fellow professionals, academics, governmental and commercial representatives at the 2016 Environment Virginia Symposium held at VMI on April 5th through April 7th 2016. NAVFAC MIDLANT gave a presentation to discuss the DoD

Chesapeake Bay Program and Navy's progress towards best management practice implementation to meet the 2025 goals for nutrient and sediment reductions to the Bay. Informal discussions were held and information was provided on the programs and environmental compliance.

Storm Drain Marking Program

The Navy has a storm drain marking program, which places markers on inlets to the MS4, to remind the public that materials that flow into the storm drain end up in local waterways. The storm drain makers were specifically developed for the Navy. A total of 87 storm drain medallions were installed at JEB Little Creek on December 21 and 22nd 2015 by the JEB Little Creek PWD Environmental staff and staff interns.

Other Partnering Efforts

The Navy continually promotes responsible environmental stewardship and actively engages local government and community-based organizations to advance water quality restoration goals and initiatives. In addition to Clean the Bay Day, the Navy participates in many local and regional environmental outreach initiatives including Earth Day celebrations, Clean City USA, Tree City USA (Arbor Day) and National Public Lands Day. The Navy participates in the quarterly Regional Environmental Committee meetings and the Water Quality Technical Workgroup meetings at the Hampton Roads Planning District Commission. The purpose of the meetings are to provide an opportunity for in-depth discussions of technical issues related to the Chesapeake Bay Program and wetlands restoration projects in the region. The meetings are open to the public and membership includes local government environmental staff, DEQ, VDH, VMRC, NOAA, ODU, VIMS, COE, HRSD, CBF and ERP.

Appendix F – Outfall Screening Data

NSN Outfall Screening

3. Outfall Summary

Field crews visited 129 outfalls on NSN, including 69 outfalls that are inspected annually and the 60 outfalls identified for rotation Year 3. Outfalls are located at NSN, the NAS, and NSA Hampton Roads and were inspected for compliance with the provisions of VPDES Permit Number VA0004421. Field work for the outfall evaluation was conducted between 15 July 2015 and 29 February 2016.

The following items were evaluated to address Part I.D.2.d (1)(f) of VPDES Permit Number VA0004421:

- Condition of and around the outfall
- Land use in the drainage area
- Presence of flow from the outfall, if flow was present check for odor, color, turbidity, and floatables (non-trash related)
- Evidence of pollutants discharging to surface waters at outfalls
- Physical indicators not related to flow (i.e. damage, stains/deposits, abnormal vegetation, benthic growth, and poor pool quality)

In order to meet the requirements of the permit, monitored outfalls (analytically or visually monitored) are evaluated annually for the conditions stated above and in Part I.D.2.d (1)(f) of VPDES Permit Number VA0004421. All other outfalls (non-monitored) have been divided into three groups and evaluated once every three years. The 2015 SCE includes the evaluation of 69 Regulated/Visually Monitored Outfalls and 60 Year 3 Outfalls.

Table 3-1 is a complete listing of outfalls that were evaluated for the 2015 SCE (by outfall number). **Appendix B1** contains the completed facility Outfall Screening Forms. **Appendix B2** contains the completed facility Outfall Photo Log.

Table 3-1 Outfalls for Annual Evaluation

Inspect All Outfalls:				Choose Year:		
Annual Evaluation				Rotation Cycle		
Outfall Number	Map Grid	Regulated/Visually Monitored	SIC Codes (based on 2011-2016 Permit)	Year 1 Outfalls (2013)	Year 2 Outfalls (2014)	Year 3 Outfalls (2015)
001/199	Deperming Pier	Regulated Monitored	N/A	004	030	300
003	N-3	Regulated Monitored	5171, 4225, 4499	006	032	301
005	N-2	Regulated Monitored	5171, 4225, 4499	007	035	302
011	M-2	Regulated Monitored	4225	008	036	303
014	L-3	Regulated Monitored	3731	009	037	304
016	L-3	Regulated Monitored	3737, 4222, 4225	010	038	306

Inspect All Outfalls:				Choose Year:		
Annual Evaluation				Rotation Cycle		
Outfall Number	Map Grid	Regulated/Visually Monitored	SIC Codes (based on 2011-2016 Permit)	Year 1 Outfalls (2013)	Year 2 Outfalls (2014)	Year 3 Outfalls (2015)
017	L-3	Regulated Monitored	4222, 4225	012	040	307
022	J-2 (SE Corner Map Grid)	Regulated Monitored	3732	013	041	308
023	J-2 (SE Corner CEP160)	Regulated Monitored	4225, 3732	015	042	309
024	J-2	Regulated Monitored	4961, 5093, 3732	018	043	310
029	I-2	Regulated Monitored	4225, 5093, 4961	019	044	311
031	H-2	Regulated Monitored	4225	020	045	312
033	H-2	Regulated Monitored	4225	021	046	313
034	H-2	Regulated Monitored	5171, 4225	025	047	314
039	F-2	Regulated Monitored	4225,	026	048	326
054	C-3	Regulated Monitored	3731	027	049	327
055	B-3	Regulated Monitored	5093, 3731, 3732	028	050	328
058	E-5	Regulated Monitored	7699, 4225, 5171, HZ	059	051	329
059	E-5	Visually Monitored	Golf Course	069	052	330
061	E-6	Regulated Monitored	4493	073	053	331
066	F-6	Regulated Monitored	4581	077	056	333
067	F-6	Regulated Monitored	4212, 4581	082	057	337
074	F-7	Regulated Monitored	4493	100	060	340
075	E-7	Regulated Monitored	4581, 4426	115	062	341
076	E-8	Regulated Monitored	4426	116	063	342
078	E-8	Regulated Monitored	4426	117	064	345
083	G-9	Regulated Monitored	4225, 3732	132	065	346
089	G-9	Regulated Monitored	4225, 3732	133	068	347
091	G-9	Regulated Monitored	4225, 3732	144	070	348
094	G-9	Regulated Monitored	4225, 3732, 4499	152	071	349
103	H-10	Regulated Monitored	4225	153	072	350
104	H-10	Regulated Monitored	4225	154	079	351
105	H-10	Regulated Monitored	4225, 3732	155	080	352

Inspect All Outfalls:				Choose Year:		
Annual Evaluation				Rotation Cycle		
Outfall Number	Map Grid	Regulated/Visually Monitored	SIC Codes (based on 2011-2016 Permit)	Year 1 Outfalls (2013)	Year 2 Outfalls (2014)	Year 3 Outfalls (2015)
110	I-10	Regulated Monitored	3732	156	081	353
112	I-10	Regulated Monitored	4225, 4581	157	087	354
113	I--10	Regulated Monitored	4225	200	101	355
114	I-10	Regulated Monitored	4961, 4581, 4961, 5171	201	102	409
135	G-14	Regulated Monitored	4225	202	118	414
139	G-15	Regulated Monitored	4225	203	119	415
149	G-14	Regulated Monitored	3724, 4225	204	120	416
205	S-4	Regulated Monitored	4225	315	121	418
206	S-4	Regulated Monitored	4225	316	122	425
207	U-4	Regulated Monitored	4225, 5093	317	123	426
208	U-4	Regulated Monitored	4225	318	124	427
332	O-12	Regulated Monitored	4581, 4225	319	125	600
334	P-11 (to the left of 335)	Visually Monitored	4581	320	126	601
335	P-11	Visually Monitored	4581	321	127	602
336	P-11 (to the right of 335)	Visually Monitored	4581	322	128	603
338	P-11 (to the left of 339)	Visually Monitored	4581	323	129	604
339	P-11	Visually Monitored	4581	324	130	606
400	L-8	Regulated Monitored	4225	325	131	607
401	N-4	Regulated Monitored	5171	331	134	608
402	J-3	Visually Monitored	5093	334	136	609
404	H-3	Regulated Monitored	LP Fuel Farm	335	137	610
407	K-6	Visually Monitored	4225	336	138	612
408	K-9	Regulated Monitored	4212, 4581, 7699, 4953, 4226	343	140	613
410	L-9	Visually Monitored	LP Fuel Farm	344	141	614
411	L-9	Visually Monitored	LP Fuel Farm	410	142	615
412	L-9 (Basin 412)	Visually Monitored	LP Fuel Farm	411	143	616
413	L-9/K-9	Visually Monitored	LP Fuel Farm	413	145	617

Inspect All Outfalls:				Choose Year:		
Annual Evaluation				Rotation Cycle		
Outfall Number	Map Grid	Regulated/Visually Monitored	SIC Codes (based on 2011-2016 Permit)	Year 1 Outfalls (2013)	Year 2 Outfalls (2014)	Year 3 Outfalls (2015)
417	K-9 (Basin 417)	Visually Monitored	LP Fuel Farm	417	146	
419	L-9	Visually Monitored	LP Fuel Farm	418	147	
420	L-8 (Basin 420)	Visually Monitored	LP Fuel Farm	420	151	
421	K-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581	605	158	
422	J-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581	611	305	
423	J-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581			
424	J-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581			
605	Q-9	Visually Monitored	N/A			
611	Q-7	Visually Monitored	7699			

The field data form for the outfall evaluation was developed based on the Outfall Reconnaissance Inventory Form presented in the Center for Watershed Protection Illicit Discharge Detection and Elimination Guidance Manual. Of the 129 outfalls evaluated, none showed evidence of potential stormwater pollution. It should be noted that only the outfall locations were observed in 2015, no up gradient features or additional stormwater infrastructure were inspected.

Table 3-2 2015 Outfall Screening Summary

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
Industrial Regulated Outfalls					
001/199	Deperming Pier	Deperming Water Exchange System	None	None	None
003	N-3	Petroleum Bulk Stations and Terminals, General Warehousing and Storage, Ship Building and Repairing	None	None	None
005	N-2	General Warehousing and Storage	None	None	None
011	M-2	Ship Building and Repairing	None	None	None
014	L-3	Ship Building and Repairing	None	None	None
016	L-3	Ship Building and Repairing, Refrigerated Warehousing and Storage, General Warehousing and Storage	None	None	None
017	L-3	Refrigerated Warehousing and Storage	None	None	None
022	J-2	Boat Building and Repairing	None	None	None
023	J-2	Boat Building and Repairing, Refrigerated Warehousing and Storage	None	None	Pipe not visible; 48” reinforced concrete pipe up gradient. No flow in up gradient features.
024	J-2	Boat Building and Repairing, Steam and Air-Conditioning Supply, Scrap and Waste Materials	None	None	None

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
029	I-2	General Warehousing and Storage, Steam and Air-Conditioning Supply, Scrap and Waste Materials	None	None	Outfall not visible under wharf.
031	H-2	General Warehousing and Storage	None	None	None
033	H-2	General Warehousing and Storage	None	None	None
034	H-2	General Warehousing and Storage, Petroleum Bulk Stations and Terminals	None	None	None
039	F-2	Special Warehousing and Storage, Not Elsewhere Classified; Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
054	C-3	None, drainage from Lot 8 area	None	None	None
055	B-3	Boat Building and Repairing; Scrap and Waste Materials	None	None	None
058	E-5	General Warehousing and Storage; Special Warehousing and Storage, Not Elsewhere Classified; Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
059	E-5	Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
061	E-6	None (Marinas)	None	None	None
066	F-6	None	None	None	None

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
067	F-6	None	None	None	None
074	F-7	None (Marinas)	None	None	None
075	E-7	Airports, Flying Fields, and Airport Terminal Services	None	None	None
076	E-8	Airports, Flying Fields, and Airport Terminal Services	None	None	None
078	E-8	Special Warehousing and Storage, Not Elsewhere Classified; Airports, Flying Fields, and Airport Terminal Services	None	None	None
083	G-9	Boat Building and Repairing; General Warehousing and Storage; Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
089	G-9	Boat Building and Repairing; General Warehousing and Storage; Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
091	G-9	Boat Building and Repairing; General Warehousing and Storage; Repair Shops and Related Services, Not Elsewhere Classified	None	None	None

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
094	G-9	Boat Building and Repairing; General Warehousing and Storage; Water Transportation Services, Not Elsewhere Classified; Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
103	H-10	General Warehousing and Storage	None	None	None
104	H-10	General Warehousing and Storage	None	None	None
105	H-10	General Warehousing and Storage	None	None	None
110	I-10	Boat Building and Repairing	None	None	None
112	I-10	Boat Building and Repairing; General Warehousing and Storage; Airports, Flying Fields, and Airport Terminal Services	None	None	None
113	I-10	None	None	None	None
114	I-10	Aircraft Engines and Engine Parts ; Boat Building and Repairing; Airports, Flying Fields, and Airport Terminal Services; Steam and Air-Conditioning Supply	None	None	None
135	G-14	Aircraft Engines and Engine Parts; General Warehousing and Storage; Special Warehousing and Storage, Not Elsewhere Classified; Airports, Flying Fields, and Airport Terminal Services	None	None	None

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
139	G-15	None	None	None	None
149	G-14	Aircraft Engines and Engine Parts; General Warehousing and Storage	None	None	None
205	S-4	None	None	None	Outfall not accessible. No flow or water in up gradient storm features.
206	S-4	None	None	None	Outfall not accessible. No flow or water noted in up gradient storm features.
207	U-4	General Warehousing and Storage; Scrap and Waste Materials	None	None	None
208	U-4	General Warehousing and Storage; Scrap and Waste Materials	None	None	None
332	O-12	General Warehousing and Storage; Airports, Flying Fields, and Airport Terminal Services	None	None	None
334	P-11	Airports, Flying Fields, and Airport Terminal Services	None	None	None
335	P-11	Airports, Flying Fields, and Airport Terminal Services	None	None	None
336	P-11	Airports, Flying Fields, and Airport Terminal Services	None	None	None
338	P-11	Airports, Flying Fields, and Airport Terminal Services	None	None	None
339	P-11	General Warehousing and Storage; Airports, Flying Fields, and Airport Terminal Services	None	None	None

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
400	L-8	General Warehousing and Storage	None	None	None
401	N-4	Non-Classified Facilities (Bulk fuel without maintenance)	None	None	None
402	J-3	AST berm water	None	None	None
404	H-3	Petroleum Bulk Stations and Terminals	None	None	None
407	K-6	Cargo handling and fuel transfer	None	None	None
408	J-9	Local Trucking Without Storage; Special Warehousing and Storage, Not Elsewhere Classified; Refuse Systems	None	None	None
410	L-9	Petroleum Bulk Stations and Terminals	None	None	None
411	L-9	Petroleum Bulk Stations and Terminals	None	None	None
412	L-9	Petroleum Bulk Stations and Terminals	None	None	None
413	L-9	Petroleum Bulk Stations and Terminals	None	None	None
417	L-9	Petroleum Bulk Stations and Terminals	None	None	None
419	L-9	Petroleum Bulk Stations and Terminals	None	None	None
420	L-9	Petroleum Bulk Stations and Terminals	None	None	None
421	K-9	Hazardous Waste Treatment, Storage or Disposal	None	None	None

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
422	J-9	Aircraft Engines and Engine Parts	None	None	None
423	J-9	Aircraft Engines and Engine Parts	None	None	None
424	J-9	Aircraft Engines and Engine Parts	None	None	None
605	P-9	Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
611	S-8	Repair Shops and Related Services, Not Elsewhere Classified	None	None	None
Year 3 Outfalls (2015)					
300	I-14	N/A	None	None	None
301	O-15	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
302	N-15	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
303	N-15	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
304	N-15	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
306	M-14	N/A	N/A	N/A	Outfall not accessible. Outfall on runway approach.
307	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
308	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
309	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
310	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
311	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
312	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
313	K-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
314	J-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
326	L-12	N/A	None	None	Outfall not located by channel located and no flow or indicators were observed.
327	L-12	N/A	None	None	None
328	N-12	N/A	None	None	None
329	N-12	N/A	None	None	None
330	N-13	N/A	None	None	None
331	N-12	N/A	None	None	None
333	O-14	N/A	N/A	N/A	Outfall not accessible. Located in high secure ordinance handling area.
340	P-11	N/A	N/A	N/A	Outfall not accessible. Located in high secure ordinance handling area.
341	P-14	N/A	N/A	N/A	Outfall not accessible. Located in high secure ordinance handling area.
342	P-14	N/A	N/A	N/A	Outfall not accessible. Located in high secure ordinance handling area.

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
345	I-13	N/A	None	None	None
346	L-12	N/A	None	None	None
347	L-12	N/A	None	None	None
348	L-12	N/A	None	None	None
349	M-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
350	L-14	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
351	N-12	N/A	N/A	N/A	Outfall not accessible. On other side of security fence along Masons Creek.
352	N-12	N/A	None	None	None
353	N-12	N/A	None	None	None
354	N-13	N/A	None	None	None
355	N-13	N/A	None	None	None
409	L-8	N/A	None	None	None
414	J-10	N/A	N/A	N/A	None
415	N/A	N/A	N/A	N/A	Outfall not found. Not in GIS.
416	J16	N/A	None	None	None
418	N/A	N/A	N/A	N/A	Outfall not found. Not in GIS.
425	J-9	N/A	None	None	None
426	J-9	N/A	None	None	None
427	J-9	N/A	None	None	None
600	O-9	N/A	None	None	Erosion on outfall retaining wall. Recommend maintenance of the eroding retaining wall.

Outfall	Map	Industrial Activity	Physical Indicators	Evidence of Pollution	Recommendations/Notes
601	O-9	N/A	None	None	Outfall not observed due to excessive vegetation. Recommend maintenance of excessive vegetation.
602	O-9	N/A	None	None	None
603	P-9	N/A	None	None	None
604	P-9	N/A	None	None	Outfall not observed due to excessive vegetation. Recommend maintenance of excessive vegetation.
606	Q-9	N/A	None	None	Outfall not observed due to excessive vegetation. Recommend maintenance of excessive vegetation.
607	Q-8	N/A	None	None	Outfall not observed due to excessive vegetation. Recommend maintenance of excessive vegetation.
608	R-8	N/A	None	None	Outfall not observed due to excessive vegetation. Recommend maintenance of excessive vegetation.
609	R-8	N/A	None	None	None
610	Q-8	N/A	None	None	Outfall not observed due to excessive vegetation. Recommend maintenance of excessive vegetation.
612	R-7	N/A	None	None	None
613	R-7	N/A	None	None	None
614	R-7	N/A	None	None	None
615	R-7	N/A	None	None	None
616	Q-6	N/A	None	None	None
617	Q-6	N/A	None	None	None

Appendix B1

Outfall Screening Forms

Annual Evaluation			
Outfall Number	Map Grid	Regulated/Visually Monitored	SIC Codes (based on 2011-2016 Permit)
001/199	Deperming Pier	Regulated Monitored	N/A
3	N-3	Regulated Monitored	5171, 4225, 4499
5	N-2	Regulated Monitored	5171, 4225, 4499
11	M-2	Regulated Monitored	4225
14	L-3	Regulated Monitored	3731
16	L-3	Regulated Monitored	3737, 4222, 4225
17	L-3	Regulated Monitored	4222, 4225
22	J-2	Regulated Monitored	3732
23	J-2	Regulated Monitored	4225, 3732
24	J-2	Regulated Monitored	4961, 5093, 3732
29	I-2	Regulated Monitored	4225, 5093, 4961
31	H-2	Regulated Monitored	4225
33	H-2	Regulated Monitored	4225
34	H-2	Regulated Monitored	5171, 4225
39	F-2	Regulated Monitored	4225,
54	C-3	Regulated Monitored	3731
55	B-3	Regulated Monitored	5093, 3731, 3732
58	E-5	Regulated Monitored	7699, 4225, 5171, HZ
59	E-5	Visually Monitored	Golf Course
61	E-6	Regulated Monitored	4493
66	F-6	Regulated Monitored	4581
67	F-6	Regulated Monitored	4212, 4581
74	F-7	Regulated Monitored	4493
75	E-7	Regulated Monitored	4581, 4426
76	E-8	Regulated Monitored	4426
78	E-8	Regulated Monitored	4426
83	G-9	Regulated Monitored	4225, 3732
89	G-9	Regulated Monitored	4225, 3732
91	G-9	Regulated Monitored	4225, 3732
94	G-9	Regulated Monitored	4225, 3732, 4499
103	H-10	Regulated Monitored	4225
104	H-10	Regulated Monitored	4225
105	H-10	Regulated Monitored	4225, 3732
110	I-10	Regulated Monitored	3732
112	I-10	Regulated Monitored	4225, 4581
113	I--10	Regulated Monitored	4225

Annual Evaluation			
Outfall Number	Map Grid	Regulated/Visually Monitored	SIC Codes (based on 2011-2016 Permit)
114	I-10	Regulated Monitored	4961, 4581, 4961, 5171
135	G-14	Regulated Monitored	4225
139	G-15	Regulated Monitored	4225
149	G-14	Regulated Monitored	3724, 4225
205	S-4	Regulated Monitored	4225
206	S-4	Regulated Monitored	4225
207	U-4	Regulated Monitored	4225, 5093
208	U-4	Regulated Monitored	4225
332	O-12	Regulated Monitored	4581, 4225
334	P-11	Visually Monitored	4581
335	P-11	Visually Monitored	4581
336	P-11	Visually Monitored	4581
338	P-11	Visually Monitored	4581
339	P-11	Visually Monitored	4581
400	L-8	Regulated Monitored	4225
401	N-4	Regulated Monitored	5171
402	J-3	Visually Monitored	5093
404	H-3	Regulated Monitored	LP Fuel Farm
407	K-6	Visually Monitored	4225
408	K-9	Regulated Monitored	4212, 4581, 7699, 4953, 4226
410	L-9	Visually Monitored	LP Fuel Farm
411	L-9	Visually Monitored	LP Fuel Farm
412	L-9	Visually Monitored	LP Fuel Farm
413	L-9/K-9	Visually Monitored	LP Fuel Farm
417	K-9	Visually Monitored	LP Fuel Farm
419	L-9	Visually Monitored	LP Fuel Farm
420	L-8	Visually Monitored	LP Fuel Farm
421	K-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581
422	J-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581
423	J-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581
424	J-9	Regulated Monitored	(Internal to Outfall 115) 4953, 4581
605	Q-9	Visually Monitored	N/A
611	Q-7	Visually Monitored	7699

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Lambert Point Deperming Station		Outfall ID: 001/199
Today's date: 15 July 2015		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.11 Last 48 hours: 0.11	
Camera: Nikon AW 120		Photo #s: Outfall – 001.JPG

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: Noncontact cooling water
- Known Industries:

Notes (e.g., origin of outfall, if known): Outfalls from non-contact cooling systems aboard station. The water exchange system is only in operation four times a year for about 12 hours each time. Cooling loops were active at time of visit.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☒ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 4"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☒ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. System was operational at the time of visit. Both outfalls are for non-contact cooling systems aboard the deperming station.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 001/199

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-3		Outfall ID: 003
Today's date: 22 October 2015		Time (Military): 0830
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 59	Rainfall (in.):Last 24 hours: <0.00	Last 48 hours: <0.00
Camera: Nikon AW 120		Photo #s: DSCN6202-6203

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: Fuel Tanks
- Known Industries: Petroleum Bulk Stations and Terminals, General Warehousing and Storage, Ship Building and Repairing

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-1, CEP-2, CEP-3, CEP-4, CEP-126, CEP-204

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Flow likely tidal drainage.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 003

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-2		Outfall ID: 005
Today's date: 22 October 2015		Time (Military): 0840
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW 120		Photo #s: DSCN6204

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Site: CEP-126

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 005

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: M-2		Outfall ID: 011
Today's date: 22 October 2015		Time (Military): 0850
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN6205-6206

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Ship Building and Repairing

Notes (e.g., origin of outfall, if known): Associated Industrial Site: CEP-198

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 011

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-3		Outfall ID: 014
Today's date: 22 October 2015		Time (Military): 0900
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN6207-6208

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Ship Building and Repairing

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-198, CEP-209

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 014

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-3		Outfall ID: 016
Today's date: 22 October 2015		Time (Military): 0905
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN6209-6210

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Ship Building and Repairing, Refrigerated Warehousing and Storage, General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-156, CEP-200, CEP-201, CEP-209

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☒ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: Approximately 64"x64"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 016

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-3		Outfall ID: 017
Today's date: 22 October 2015		Time (Military): 0908
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW 120		Photo #s: DSCN6211-6212

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Refrigerated Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-156

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: ___ Top Width: ___ Bottom Width: ___	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 017

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-2		Outfall ID: 022
Today's date: 22 February 2016		Time (Military): N/A
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 52	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera:Nikon AW120		Photo #s: DSCN7237

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Boat Building and Repairing

Notes (e.g., origin of outfall, if known):
Associated Industrial Sites: CEP-160, CEP-203 & Pier 5T Boat Basin

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 022

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-2		Outfall ID: 023
Today's date: 22 October 2015		Time (Military): 0920
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 70	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN6213

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Boat Building and Repairing, Refrigerated Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-156, CEP-160, CEP-203 & Pier 5T Boat Basin. Pipe not visible, 48" RCP up gradient. No flow observed up gradient.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 023

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-2		Outfall ID: 024
Today's date: 22 October 2015		Time (Military): 0940
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 70	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN6214-6215

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Boat Building and Repairing, Steam and Air-Conditioning Supply, Scrap and Waste Materials

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-160, CEP-165, CEP 203 & Pier 5T Boat Basin, Z-309, Z-312. Outfall observed in upgradient drop inlet identified as Outfall 024.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 024

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-2		Outfall ID: 029
Today's date: 22 October 2015		Time (Military): 1010
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW 120		Photo #s: DSCN6216

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage, Steam and Air-Conditioning Supply, Scrap and Waste Materials

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: W-143, W-148, Y-108, Y-109, Z-309, Z-312. Outfall not visible under wharf. No flow upgradient.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5*** no flow in up gradient features				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 029

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-2		Outfall ID: 031
Today's date: 22 October 2015		Time (Military): 1025
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN6217-6218

Land Use in Drainage Area (Check all that apply):

☒ Industrial ☐ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: W-135, W-143

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 031

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-2		Outfall ID: 033
Today's date: 22 October 2015		Time (Military): 1040
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6219-6220

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Site: W-135

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 033

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-2		Outfall ID: 034
Today's date: 22 October 2015		Time (Military): 1045
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6221-6222

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: General Warehousing and Storage, Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: W-66, W-126, W-135, W-148

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No	***If No, Skip to Section 5***			
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Flow may be tidal drainage. No flow up gradient.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 034

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: F-2		Outfall ID: 039
Today's date: 22 October 2015		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6225-6226

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Special Warehousing and Storage, Not Elsewhere Classified; Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: W-7, W-130

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Ductile Iron	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None – slight trickle, clear with some water noted up gradient but no flows observed. May be groundwater infiltration; sunken drop inlets up gradient.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 039

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: C-3		Outfall ID: 054
Today's date: 22 October 2015		Time (Military): 1200
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 78	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: None.

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Lot 8 area drainage south of Q72. Not an industrial outfall as of 2014 SCE Report.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☒ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 8"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 054

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: B-3		Outfall ID: 055
Today's date: 22 October 2015		Time (Military): 1215
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 78	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6243-6244

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Boat Building and Repairing; Scrap and Waste Materials

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: Q-50 (including Q-50C).

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 055

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
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Section 1: Background Data

Map Grid: E-5		Outfall ID: 058
Today's date: 25 August 2015		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6248

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____

Known Industries: General Warehousing and Storage; Special Warehousing and Storage, Not Elsewhere Classified; Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: A-80, A-81, A-127, W-126, W-131, W-148, X-136, X-137, X-218, X-275, X-389

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☒ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 64" x 64"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☒ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Flow not completely discernable; may have been tidally influenced. No indicators present.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 058

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
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Section 1: Background Data

Map Grid: E-5		Outfall ID: 059
Today's date: 25 August 2015		Time (Military): 1110
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6249

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Associated Industrial Site: A-127

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Flow not discernable; pipe mostly submerged; no flow observed in up gradient features.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 059

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: E-6		Outfall ID: 061
Today's date: 25 August 2015		Time (Military): 1120
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: DSCN6252

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Marinas

Notes (e.g., origin of outfall, if known): Marina drainage, LAG-27 & LAG-77.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☒ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
No flow in directly up gradient manholes/ features.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 061

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: F-6		Outfall ID: 066
Today's date: 25 August 2015		Time (Military): 1130
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6281-6282

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries:_____

Notes (e.g., origin of outfall, if known): Roadway drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. No water or flow in up gradient drop inlets.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 066

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: F-6		Outfall ID: 067
Today's date: 25 August 2015		Time (Military): 1135
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6283-6285

Land Use in Drainage Area (Check all that apply):

☒ Industrial ☐ Open Space
☐ Ultra-Urban Residential ☐ Institutional
☐ Suburban Residential Other: _____
☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: Drainage from N26, N23, P72, and flag housing

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Flow likely tidal. Tidal wash retained in system up gradient. H2SO4 odor noted up gradient last year was not observed in 2015.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 067

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☒ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☒ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: F-7	Outfall ID: 074
Today's date: 25 August 2015	Time (Military): 1150
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Camera: Nikon AW120	Photo #s: DSCN6294-6295

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Marinas

Notes (e.g., origin of outfall, if known): Parking lot drainage from boat parking yard. Associated Industrial Sites: LAG-30

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 074

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: E-7		Outfall ID: 075
Today's date: 17 November 2015		Time (Military): 0820
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6370

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: LF-59, LF-60

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 075

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: E-8		Outfall ID: 076
Today's date: 17 November 2015		Time (Military): 0830
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.01	Last 48 hours: 0.01
Camera: Nikon AW120		Photo #s: DSCN6371

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Airfield operations

Notes (e.g., origin of outfall, if known): Airfield/ Tarmac drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 076

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: E-8		Outfall ID: 078
Today's date: 17 November 2015		Time (Military): 0840
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6372

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Special Warehousing and Storage, Not Elsewhere Classified; Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: LF-18, LF-59, LF-66

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 078

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-9		Outfall ID: 083
Today's date: 17 November 2015		Time (Military): 1230
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6300-6301

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Boat Building and Repairing; General Warehousing and Storage; Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Associated Industrial Site: V-88

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30" inside 36"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 083

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-9		Outfall ID: 089
Today's date: 17 November 2015		Time (Military): 1245
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6305-6306

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Boat Building and Repairing; General Warehousing and Storage; Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Drainage north of V-88. Associated Industrial Site: V-88

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 089

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-9		Outfall ID: 091
Today's date: 17 November 2015		Time (Military): 1300
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6307-6308

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Boat Building and Repairing; General Warehousing and Storage; Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Associated Industrial Site: V-88

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 091

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-9	Outfall ID: 094
Today's date: 17 November 2015	Time (Military): 1345
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01
Camera: Nikon AW120	Photo #s: DSCN6309-6310

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Boat Building and Repairing; General Warehousing and Storage; Water Transportation Services, Not Elsewhere Classified; Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: V-58, V-88

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 094

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-10		Outfall ID: 103
Today's date: 17 November 2015		Time (Military): 0945
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: None.

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Site: V-29

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 103

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-10		Outfall ID: 104
Today's date: 17 November 2015		Time (Military): 1000
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6311-6312, 6386-6387

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Site: V-29

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 104

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-10		Outfall ID: 105
Today's date: 17 November 2015		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW 120		Photo #s: DSCN6377

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Associated Industrial Site: V-29

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 10"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 105

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-10		Outfall ID: 110
Today's date: 17 November 2015		Time (Military): 1120
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6378-6379

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Boat Building and Repairing

Notes (e.g., origin of outfall, if known): Associated Industrial Site: V-47

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☒ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 110

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-10		Outfall ID: 112
Today's date: 17 November 2015		Time (Military): 1130
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6313

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Boat Building and Repairing; General Warehousing and Storage; Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: V-29, V-70, V-71,

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☒ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 112

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-10		Outfall ID: 113
Today's date: 17 November 2015		Time (Military): 1345
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6314, 6316-6317

Land Use in Drainage Area (Check all that apply):

☒ Industrial ☐ Open Space
☐ Ultra-Urban Residential ☐ Institutional
☐ Suburban Residential Other: _____
☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Lot drainage around V51 and former location of V52. Not an industrial outfall as of 2014 SCE Report.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 113

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-10		Outfall ID: 114
Today's date: 17 November 2015		Time (Military): 1350
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6315-6317

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Aircraft Engines and Engine Parts ; Boat Building and Repairing; Airports, Flying Fields, and Airport Terminal Services; Steam and Air-Conditioning Supply

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: P-1 (P Compound), V-70, V-71, V-127

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 114

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-14		Outfall ID: 135
Today's date: 24 August 2015		Time (Military): 0950
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6340

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____

Known Industries: Aircraft Engines and Engine Parts; General Warehousing and Storage; Special Warehousing and Storage, Not Elsewhere Classified; Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: SP-35, SP-86 (A, B, D, E), SP-113, SP-236, SP-237, SP-300, SP-301

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 135

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-15		Outfall ID: 139
Today's date: 24 August 2015		Time (Military): 0940
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6344

Land Use in Drainage Area (Check all that apply):

☒ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: RV, Boat & Vehicle Storage

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Drainage from retention basin to the south which drains parking area.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 139

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: G-14		Outfall ID: 149
Today's date: 24 August 2015		Time (Military): 1000
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6375-6376

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Aircraft Engines and Engine Parts; General Warehousing and Storage

Notes (e.g., origin of outfall, if known):
Associated Industrial Sites: SP-300 and SP-301, SP-303 and SP-304, SP-86 (A, B, D, E)

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☒ Triple ☐ Other: _____	Diameter/Dimensions: 2 x 48" & 1 x 36"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Flow appears to be tidal.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 149

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: S-4		Outfall ID: 205 – Not accessible
Today's date: 19 October 2015		Time (Military): 1430
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: None

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Outfall not accessible, on NIT side of the SDA fence.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Outfall not accessible. No flow or water in up gradient storm features.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 205

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: S-4		Outfall ID: 206 – Not accessible
Today's date: 19 October 2015		Time (Military): 1440
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: None

Land Use in Drainage Area (Check all that apply):

☒ Industrial ☐ Open Space
☐ Ultra-Urban Residential ☐ Institutional
☐ Suburban Residential Other: _____
☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Outfall not accessible. No flow/ water noted in up gradient storm features.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 206

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: U-4		Outfall ID: 207
Today's date: 19 October 2015		Time (Military): 1450
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6348

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage; Scrap and Waste Materials

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: SDA-205, SDA-210, SDA-211, SDA-214, SDA-216

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully Drop inlet
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Drop inlet. Internal outfall – 24" inlet.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 207

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: U-4		Outfall ID: 208
Today's date: 19 October 2015		Time (Military): 1500
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6349

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage; Scrap and Waste Materials

Notes (e.g., origin of outfall, if known): Associated Industrial Site: SDA-204, SDA-205, SDA-210, SDA-211, SDA-218

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully Drop inlet
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Internal outfall. 24" drop inlet.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 208

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: O-12		Outfall ID: 332
Today's date: 28 August 2015		Time (Military): 0815
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 70	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6367

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage; Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Site: LP-117, L-167, LP-205 & 205-A

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 332

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-11		Outfall ID: 334
Today's date: 28 August 2015		Time (Military): 0830
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 70	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s:DSCN6363

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Runway area drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 334

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-11		Outfall ID: 335
Today's date: 28 August 2015		Time (Military): 0832
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 70	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6364

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Airfield runway and parking lot drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 335

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-11		Outfall ID: 336
Today's date: 28 August 2015		Time (Military): 0835
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 70	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: DSCN6365-6366

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Airfield parking lot drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 336

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-11	Outfall ID: 338
Today's date: 29 February 2016	Time (Military): 1100
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Camera: Nikon AW120	Photo #s: Outfalls - 338 & 339

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: LP-167, LP-205 & 205A, LP-210

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☒ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 338

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-11		Outfall ID: 339
Today's date: 29 February 2016		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: Outfalls - 338 & 339

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: General Warehousing and Storage; Airports, Flying Fields, and Airport Terminal Services

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: LP-117, LP-167, LP-205 & 205-A, LP-210

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☒ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 339

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-8		Outfall ID: 400
Today's date: 29 February 2016		Time (Military): 1000
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN7251

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☒ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: General Warehousing and Storage

Notes (e.g., origin of outfall, if known): Drainage from the CD area, commercial, gas stations, and warehousing and storage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☒ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 120"x240"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
In secure area west of runway.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 400

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-4		Outfall ID: 401
Today's date: 22 October 2015		Time (Military): 0820
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 55	Rainfall (in.): Last 24 hours: <0.00 Last 48 hours: <0.00	
Camera: Nikon AW120		Photo #s: DSCN350-351

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Non-Classified Facilities (Bulk fuel without maintenance)

Notes (e.g., origin of outfall, if known): Associated Industrial Sites: CEP-1, CEP-2, CEP-3, CEP-11

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 401

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-3		Outfall ID: 402
Today's date: 22 October 2015		Time (Military): 0800
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 55	Rainfall (in.): Last 24 hours: <0.00	Last 48 hours: <0.00
Camera: Nikon AW120		Photo #s: None

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: AST berm water

Notes (e.g., origin of outfall, if known): Z-312 AST

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Drop inlet	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Z-312 AST berm water. Internal outfall/ manhole

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 402

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: H-3		Outfall ID: 404
Today's date: 22 October 2015		Time (Military): 0810
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 55	Rainfall (in.): Last 24 hours: <0.01 Last 48 hours: <0.01	
Camera: Nikon AW120		Photo #s: None

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Associated Industrial Site: W-66, downstream of the OWS. Internal point.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24" converging into main line that is 30"rcp ____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 404

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: K-6		Outfall ID: 407
Today's date: 22 February 2016		Time (Military): 1300
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 50	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: Nikon AW120		Photo #s: DSCN7233

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Unknown outfall, not in GIS.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☒ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 6"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 407

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: K-9		Outfall ID: 408
Today's date: 18 August 2015		Time (Military): 0845
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6333-6334

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Local Trucking Without Storage; Special Warehousing and Storage, Not Elsewhere Classified; Refuse Systems

Notes (e.g., origin of outfall, if known): Drainage from LP 24/ LP 26.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 60"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☒ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Internal outfall. Flow likely compressor/ steam allowable.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 408

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-9		Outfall ID: 410
Today's date: 18 August 2015		Time (Military): 0930
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 78	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6359

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum bulk storage

Notes (e.g., origin of outfall, if known): Internal outfall at LP fuel farm. Drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☒ Other: rectangular	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 410

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-9		Outfall ID: 411
Today's date: 18 August 2015		Time (Military): 0920
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 78	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6358

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Internal outfall at LP fuel farm drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Drop inlet	☐ Circular ☐ Elliptical ☐ Box ☒ Other: rectangular	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 411

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-9		Outfall ID: 412
Today's date: 18 August 2015		Time (Military): 1025
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6357

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Internal outfall of LP fuel farm drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☒ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 412

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-9		Outfall ID: 413
Today's date: 18 August 2015		Time (Military): 0915
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6355

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Internal outfall at LP fuel farm drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Drop inlet	☐ Circular ☐ Elliptical ☐ Box ☒ Other: rectangular	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 413

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: K-9		Outfall ID: 417
Today's date: 18 August 2015		Time (Military): 1010
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: None

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Internal outfall at LP fuel farm drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Internal outfall/ manhole	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.
Internal outfall/ manhole

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 417

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-9		Outfall ID: 419
Today's date: 18 August 2015		Time (Military): 0945
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 78	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6360

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Internal outfall at LP fuel farm drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: drop inlet	☐ Circular ☐ Elliptical ☐ Box ☒ Other: rectangular	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 419

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-8		Outfall ID: 420
Today's date: 18 August 2015		Time (Military): 0955
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 78	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6361

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Petroleum Bulk Stations and Terminals

Notes (e.g., origin of outfall, if known): Internal outfall at LP fuel farm drop inlet.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Drop inlet	☐ Circular ☐ Elliptical ☐ Box ☒ Other: rectangular	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 420

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: K-9		Outfall ID: 421
Today's date: 18 August 2015		Time (Military): 1130
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 85	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6362

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: Hazardous Waste Treatment, Storage, and Disposal

Notes (e.g., origin of outfall, if known): Associated Industrial Site: LP-159

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Drop Inlet	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 421

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-9		Outfall ID: 422
Today's date: 18 August 2015		Time (Military): 1050
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 80	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6335-6337

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Aircraft Engines and Engine Parts

Notes (e.g., origin of outfall, if known): Internal outfall south of V-147

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: Drop inlet	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 422

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-9		Outfall ID: 423
Today's date: 18 August 2015		Time (Military): 1055
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6335-6337

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Aircraft Engines and Engine Parts

Notes (e.g., origin of outfall, if known): Internal outfall south of V-147.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 423

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-9		Outfall ID: 424
Today's date: 18 August 2015		Time (Military): 1110
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 82	Rainfall (in.): Last 24 hours: 0.01 Last 48 hours: 0.01	
Camera: Nikon AW120		Photo #s: DSCN6338-6339

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Aircraft Engines and Engine Parts;

Notes (e.g., origin of outfall, if known): Internal outfall south of (behind) V-147.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 424

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
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Section 1: Background Data

Map Grid: Q-9		Outfall ID: 605
Today's date: 15 December 2015		Time (Military): 0850
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: DSCN6368, DSCN6877

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☒ Open Space
☐ Institutional
Other: _____
Known Industries: Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): MCA-612, Area and parking lot drainage near elementary school.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully Unknown, can't see bottom
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 605

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
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Section 1: Background Data

Map Grid: S-8		Outfall ID: 611
Today's date: 15 December 2015		Time (Military): 0955
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: DSCN6369

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries: Repair Shops and Related Services, Not Elsewhere Classified

Notes (e.g., origin of outfall, if known): Parking lot and open area drainage from NH-31B area of NSA HR.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24" or 36" can only see top of pipe through vegetation _____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully Unknown/ partially visible
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Outfall only partially visible - can only see top of pipe through vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 611

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Year 3 Evaluation		
Outfall Number	Map Grid	Regulated/Visually Monitored
300	I-14	Non-Monitored
301	O-15	Non-Monitored
302	N-15	Non-Monitored
303	N-15	Non-Monitored
304	N-15	Non-Monitored
306	M-14	Non-Monitored
307	L-14	Non-Monitored
308	L-14	Non-Monitored
309	L-14	Non-Monitored
310	L-14	Non-Monitored
311	L-14	Non-Monitored
312	L-14	Non-Monitored
313	K-14	Non-Monitored
314	J-14	Non-Monitored
326	L-12	Non-Monitored
327	L-12	Non-Monitored
328	N-12	Non-Monitored
329	N-12	Non-Monitored
330	N-13	Non-Monitored
331	N-12	Non-Monitored
333	O-14	Non-Monitored
337	P-11	Non-Monitored
340	P-14	Non-Monitored
341	P-14	Non-Monitored
342	Q-15	Non-Monitored
345	I-13	Non-Monitored
346	L-12	Non-Monitored
347	L-12	Non-Monitored
348	L-12	Non-Monitored
349	M-14	Non-Monitored
350	L-14	Non-Monitored
351	L-14	Non-Monitored
352	N-12	Non-Monitored
353	N-12	Non-Monitored
354	N-13	Non-Monitored
355	N-13	Non-Monitored
409	L-8	Non-Monitored
414	J-10	Non-Monitored
415	Unknown	Non-Monitored

Year 3 Evaluation		
Outfall Number	Map Grid	Regulated/Visually Monitored
416	I-16	Non-Monitored
418	Unknown	Non-Monitored
425	J-9	Non-Monitored
426	J-9	Non-Monitored
427	J-9	Non-Monitored
600	O-9	Non-Monitored
601	O-9	Non-Monitored
602	O-9	Non-Monitored
603	P-9	Non-Monitored
604	P-9	Non-Monitored
606	Q-9	Non-Monitored
607	Q-8	Non-Monitored
608	R-8	Non-Monitored
609	R-8	Non-Monitored
610	Q-8	Non-Monitored
612	R-7	Non-Monitored
613	R-7	Non-Monitored
614	P-7	Non-Monitored
615	R-7	Non-Monitored
616	Q-6	Non-Monitored
617	Q-6	Non-Monitored

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Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-14		Outfall ID: 300
Today's date: 28 August 2015		Time (Military): 0900
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 72	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW 120		Photo #s: DSCN6414

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☒ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other:_____
- Known Industries:_____

Notes (e.g., origin of outfall, if known): Entrance to Masons Creek box culvert from ditch at Bellinger Boulevard. Outfalls 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, and 325 drain through Outfall 300.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☒ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 11 x 20 feet	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☒ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☒ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None. Tidal system, drainage from Masons Creek.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 300

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☒ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
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Section 1: Background Data

Map Grid: O-15		Outfall ID:301 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.):Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☐ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other:See notes below

☐ Commercial Known Industries: _____

Notes (e.g., origin of outfall, if known): Golf Course and NM area runoff, regulated industrial activity. Outfalls 328, 329, 330, 331, 332, 334, 335, 336, 337, 338, 339, 340, 341, and 342 drain through Outfall 301.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☒ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 60”_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 301

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

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Section 1: Background Data

Map Grid: N-15		Outfall ID: 302 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): No regulated industrial activities. Outfall 333 discharges into a drainage ditch leading to Outfall 302.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☒ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 54x 36"	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 302

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-15		Outfall ID: 303 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): NM area. No regulated industrial activities.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 303

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-15	Outfall ID: 304 – Not accessible (Security Fence)
Today's date: N/A	Time (Military): N/A
Investigators: N/A	Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A
Camera: N/A	Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 304

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: M-14 (Basin 306)		Outfall ID: 306 – Not accessible (Runway approach)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): c

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☒ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 306

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 307 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: ___ Top Width: ___ Bottom Width: ___	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 307

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 308 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F):N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 27x33"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 308

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 309 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling. Outfalls 326 and 327 discharge into drainage ditch leading to Outfall 309.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☒ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 309

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 310 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12”_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 310

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 311 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): None

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30”_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No	***If No, Skip to Section 5*** no flow in up gradient features			
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 311

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 312 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): None

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 312

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: K-14		Outfall ID: 313 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 313

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-14		Outfall ID: 314 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known):

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 314

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-12		Outfall ID: 326
Today's date: 29 February 2016		Time (Military): 1040
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: Nikon AW 120		Photo #s: DSCN7260

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): LP-166

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 326

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-12		Outfall ID: 327
Today's date: 29 February 2016		Time (Military): 1030
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7257

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 327

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-12		Outfall ID: 328
Today's date: 29 February 2016		Time (Military): 1112
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7272

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 328

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-12		Outfall ID: 329
Today's date: 29 February 2016		Time (Military): 1110
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7271

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways. No de-icing or fueling

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☒ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 329

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-13		Outfall ID: 330
Today's date: 29 February 2016		Time (Military): 1130
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7278

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30”_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 330

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-12		Outfall ID: 331
Today's date: 29 February 2016		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7266

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 331

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: O-14		Outfall ID: 333 – Not accessible (Secure ordinance storage)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): No regulated industrial avtivity. NM area.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 42”_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 333

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-11		Outfall ID: 337
Today's date: 18 December 2015		Time (Military): 0840
Investigators: L. Webb		Form completed by: J. Oliver
Temperature (°F): 50	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours:0.00
Camera: Nikon AW 120		Photo #s: DSCN4629

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Lot area drainage south of the AMC air terminal.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 18"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 337

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-14		Outfall ID: 340 – Not accessible (Secure ordinance storage)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): NM area.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☒ Other: terra cotta	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15”_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 340

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-14		Outfall ID: 341 – Not accessible (Secure ordinance storage)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): NM area drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☒ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 27”_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully Unknown/ not visible
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 341

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Q-15		Outfall ID: 342 – Not accessible (Secure ordinance storage)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: None N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): NM area drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"_____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 342

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-13		Outfall ID: 345
Today's date: 22 February 2016		Time (Military): 1430
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 50	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: None N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Appears to be an internal outfall.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 15"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 345

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-12		Outfall ID: 346
Today's date: 29 February 2016		Time (Military): 1030
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7255

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Fire station along flight line.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 346

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-12		Outfall ID: 347
Today's date: 29 February 2016		Time (Military): 1030
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7255

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Fire station along flight line.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 347

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-12		Outfall ID: 348
Today's date: 29 February 2016		Time (Military): 1030
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7256

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Fire station along flight line.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 348

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: M-14		Outfall ID: 349 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☐ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☒ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☒ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"x35"	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 349

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 350 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling. No pipe data.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 350

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-14		Outfall ID: 351 – Not accessible (Security Fence)
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling. No pipe data.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 351

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-12		Outfall ID: 352
Today's date: 29 February 2016		Time (Military): 1115
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: None DSCN7274

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 352

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-12		Outfall ID: 353
Today's date: 29 February 2016		Time (Military): 115
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7274

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 36"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 353

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-13		Outfall ID: 354
Today's date: 29 February 2016		Time (Military): 1130
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: Last 48 hours:	
Camera: Nikon AW 120		Photo #s: DSCN7278

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries:_____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 354

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: N-13		Outfall ID: 355
Today's date: 29 February 2016		Time (Military): 1130
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN7278

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Flight line runway and taxiways, no regulated industrial activity. No de-icing or fueling.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30”_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☒ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 355

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: L-8		Outfall ID: 409
Today's date: 29 February, 2016		Time (Military): 1015
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: Nikon AW 120		Photo #s: DSCN6360

Land Use in Drainage Area (Check all that apply):

☒ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: LP fuel farm

Notes (e.g., origin of outfall, if known): Tank LP-42 (LP Fuel Farm), regulated industrial activity. Flight line runway and taxiways. No fueling or de-icing. Internal outfall/ sample point.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 409

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-10		Outfall ID: 414
Today's date: 18 December 2015		Time (Military): 0830
Investigators: L. Webb		Form completed by: J. Oliver
Temperature (°F): 50	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: <0.00
Camera: Nikon AW 120		Photo #s: DSCN4626

Land Use in Drainage Area (Check all that apply):

- ☒ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Parking lot drainage, located north of LP21 and LP48 hangars (aircraft repair and maintenance), no activity north of the building.

Notes (e.g., origin of outfall, if known): LP-21 and LP-48. Physical pipe not accessible and no additional pipe data found.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 414

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Unknown		Outfall ID: 415 – Unknown
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☐ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: _____

Notes (e.g., origin of outfall, if known): Unknown outfall, not found in GIS.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 415

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: I-16		Outfall ID: 416
Today's date: 24 August 2015		Time (Military): 1100
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 74	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: None

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: SP-82- Utility/electrician storage yard

Notes (e.g., origin of outfall, if known): Internal outfall/sampling point.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 4 pipes within outfall (all pipes RCP): NE: 10" NW: 24" W: 12" S: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 416

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Unknown		Outfall ID: 418 - Unknown
Today's date: N/A		Time (Military): N/A
Investigators: N/A		Form completed by: J. Oliver
Temperature (°F): N/A	Rainfall (in.): Last 24 hours: N/A	Last 48 hours: N/A
Camera: N/A		Photo #s: N/A

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____s

Notes (e.g., origin of outfall, if known): Unknown outfall, not found in GIS.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 418

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-9		Outfall ID: 425
Today's date: 18 August 2015		Time (Military): 0815
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 75	Rainfall (in.): Last 24 hours: <0.01	Last 48 hours: <0.01
Camera: Nikon AW120		Photo #s: DSCN7281

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Parking lot drainage, located north of LP21 and LP48 hangars (aircraft repair and maintenance), no activity north of the building.

Notes (e.g., origin of outfall, if known): Internal outfall/sampling point, north of LP21 and LP48 hangars.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 30"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 425

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-9		Outfall ID: 426
Today's date: 22 February, 2016		Time (Military): 1420
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 50	Rainfall (in.): Last 24 hours: N/A Last 48 hours: N/A	
Camera: Nikon AW 120		Photo #s: DSCN7239

Land Use in Drainage Area (Check all that apply):

☒ Industrial
☐ Ultra-Urban Residential
☐ Suburban Residential
☐ Commercial
☐ Open Space
☐ Institutional
Other: _____
Known Industries:_____

Notes (e.g., origin of outfall, if known): Internal Outfall

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☒ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 10"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 426

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: J-9		Outfall ID: 427
Today's date: 18 August 2015		Time (Military): 0817
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 75	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN7243

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____

Known Industries: Parking lot drainage, located north of LP21 and LP48 hangars (aircraft repair and maintenance), no activity north of the building

Notes (e.g., origin of outfall, if known): Internal outfall/sampling point, north of LP21 and LP48 hangars

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 427

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: O-9		Outfall ID: 600
Today's date: 15 December 2015		Time (Military): 0852
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6870-6872

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Drainage from around baseball fields.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 60"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Some erosion on the back side of the concrete retaining wall. Recomment maintence of the eroded retaining wall.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 600

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☒	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	Erosion on the back side of the concrete retaining wall.
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: O-9		Outfall ID: 601
Today's date: 15 December 2015		Time (Military): 0855
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6873

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Drainage from around baseball fields. Pipe not visible.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Pipe not visible, area overgrown with vegetation, but no flow observed in the general area. Recommend maintenance of the excessive vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 601

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: O-9		Outfall ID: 602
Today's date: 15 December 2015		Time (Military): 0830
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6865-6866

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries:_____

Notes (e.g., origin of outfall, if known): Forested area north of outfall and area south of MCA-602

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 12"_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully -Unknown- could not see bottom
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 602

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-9		Outfall ID: 603
Today's date: 15 December 2015		Time (Military): 0840
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6867

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Area around MCA-600. Pipe not visible.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Pipe not visible. May be submerged or covered with vegetation. No flow observed in pool and good overall water quality observed.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 603

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation. Pipe may also be submerged.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-9		Outfall ID: 604
Today's date: 15 December 2015		Time (Military): 0845
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6868-6869

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☒ Open Space

☐ Ultra-Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries:_____

Notes (e.g., origin of outfall, if known): Parking lot drainage. Pipe not visible

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Pipe not visible. May be submerged or covered with vegetation. No flow observed in pool and good overall water quality observed. Recommend maintenance of the excessive vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 604

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Q-9		Outfall ID: 606
Today's date: 15 December 2015		Time (Military): 0915
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6875-6876

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☒ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries:_____

Notes (e.g., origin of outfall, if known): Camp Allen Housing area drainage. Pipe not visible

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Pipe not found. Dense vegetation along shoreline. No indication of flow and generally good water quality observed in drainage ditch. Recommend maintenance of the excessive vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 606

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation on other side of fence.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Q-8		Outfall ID: 607
Today's date: 15 December 2015		Time (Military): 0930
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6878-6879

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☒ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries:_____

Notes (e.g., origin of outfall, if known): Camp Allen housing area drainage. Pipe not visible due to dense vegetation.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Pipe not found due to dense vegetation, pool/drainage not observable in vegetation. Recommend maintenance of the excessive vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 607

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: R-8		Outfall ID: 608
Today's date: 15 December 2015		Time (Military): 0935
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: DSCN6880

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☒ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Camp Allen housing area drainage. Pipe not visible due to dense vegetation.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☐ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
Pipe not found due to dense vegetation, pool/drainage not observable in vegetation. Recommend maintenance of the excessive vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 608

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☐ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: R-8		Outfall ID: 609
Today's date: 15 December 2015		Time (Military): 0945
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: DSCN6881

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☒ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Camp Allen housing area drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: Unknown	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 609

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Q-8		Outfall ID: 610
Today's date: 15 December 2015		Time (Military): 0950
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: DSCN6882-6883

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☒ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Camp Allen Housing area drainage and roadway drainage. Pipe not visible due to the vegetation and fence surrounding location.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
No flow observed in drainage area. Water quality in drainage area appears to be good overall. Recommend maintenance of the excessive vegetation.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 610

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☒	☒ Excessive ☐ Inhibited	Outfall not observed sue to excessive vegetation.
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: R-7		Outfall ID: 612
Today's date: 15 December 2015		Time (Military): 1000
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.00	Last 48 hours: 0.00
Camera: Nikon AW120		Photo #s: DSCN6884-6885

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Parking lot drainage north of NH-95.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 60”_____	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No ***If No, Skip to Section 5***				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 612

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: R-7	Outfall ID: 613
Today's date: 15 December 2015	Time (Military): 1000
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Camera: Nikon AW120	Photo #s: DSCN6884-6885

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☒ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Parking lot drainage north of Building NH-95.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 60"	In Water: ☐ No ☒ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 613

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: P-7		Outfall ID: 614
Today's date: 15 December 2015		Time (Military): 0905
Investigators: J. Oliver		Form completed by: J. Oliver
Temperature (°F): 64	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00	
Camera: Nikon AW120		Photo #s: 6874

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☐ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Building north of outfall removed.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 614

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: R-7	Outfall ID: 615
Today's date: 15 December 2015	Time (Military): 1010
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Camera: Nikon AW120	Photo #s: DSCN6886-6887

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☒ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Ben Meadows housing area drainage.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☒ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 24"_____	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 615

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Q-6	Outfall ID: 616
Today's date: 15 December 2015	Time (Military): 1015
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Camera: Nikon AW120	Photo #s: DSCN6888-6889

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☒ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Ben Meadows housing area.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 48"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 616

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Site Compliance Evaluation
2015 Outfall Reconnaissance Inventory Field Sheet
Naval Station Norfolk (NSN), Norfolk, Virginia
N40080-11-D-0499, Delivery Order WE36

Section 1: Background Data

Map Grid: Q-6	Outfall ID: 617
Today's date: 15 December 2015	Time (Military): 1025
Investigators: J. Oliver	Form completed by: J. Oliver
Temperature (°F): 65	Rainfall (in.): Last 24 hours: 0.00 Last 48 hours: 0.00
Camera: Nikon AW120	Photo #s: DSCN6890-6892

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☒ Open Space
- ☐ Ultra-Urban Residential
- ☐ Institutional
- ☒ Suburban Residential
- Other: _____
- ☐ Commercial
- Known Industries: _____

Notes (e.g., origin of outfall, if known): Ben Meadows housing area.

Section 2: Outfall Description

Location	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☒ **Closed Pipe**	☒ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☒ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☒ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: 60"	In Water: ☒ No ☐ Partially ☐ Fully With Sediment: ☒ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: Top Width: Bottom Width: _____	
Flow Present?	☐ Yes ☒ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?
None.

Outfall Reconnaissance Inventory Field Sheet

Outfall ID: 617

Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow? ☐ Yes ☐ No ☒ N/A *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Pink ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables (Does not include trash)	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Evidence of Pollution at Outfall

☒ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Appendix B2

Photographic Record – 2015 Outfall Inventory

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **1**	
Outfall # **001**	
Comments	
Photograph **2**	
Outfall # **003**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **3**	
Outfall # **005**	
Comments **Outfall has pieces missing from the front of the pipe.**	
Photograph **4**	
Outfall # **011**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **5**	
Outfall # **014**	
Comments	
Photograph **6**	
Outfall # **016**	
Comments	

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

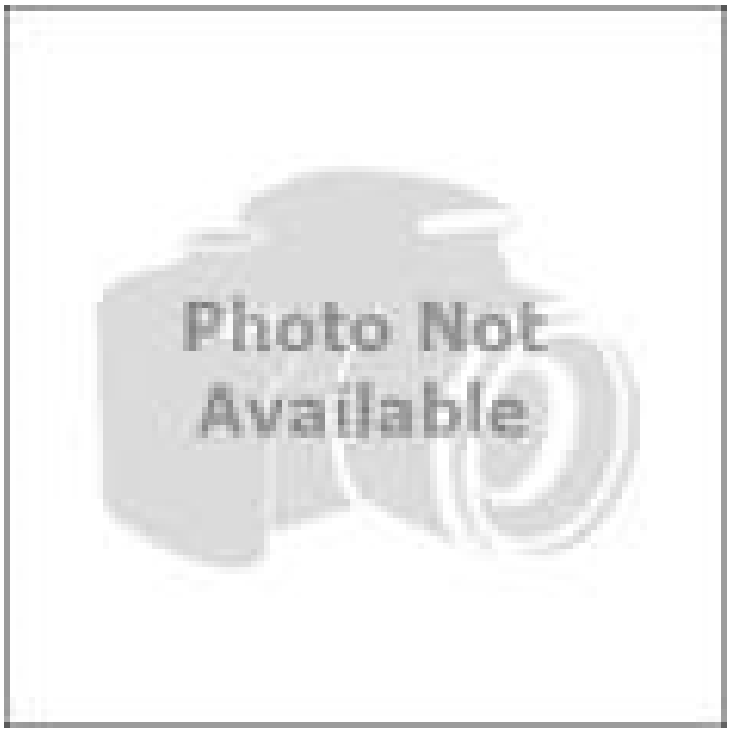
Photograph **7**	
Outfall # **017**	
Comments	

Photograph **8**	
Outfall # **022**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **9**	
Outfall # **023**	
Comments	
Photograph **10**	
Outfall # **024**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **11**	
Outfall # **029**	
Comments	
Photograph **12**	
Outfall # **031**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **13**	
Outfall # **033**	
Comments	
Photograph **14**	
Outfall # **034**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph **15**	
Outfall # **039**	
Comments	
Photograph **16**	
Outfall # **054**	
Comments **Bulkhead in secured fenced in are near Q-72.**	

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

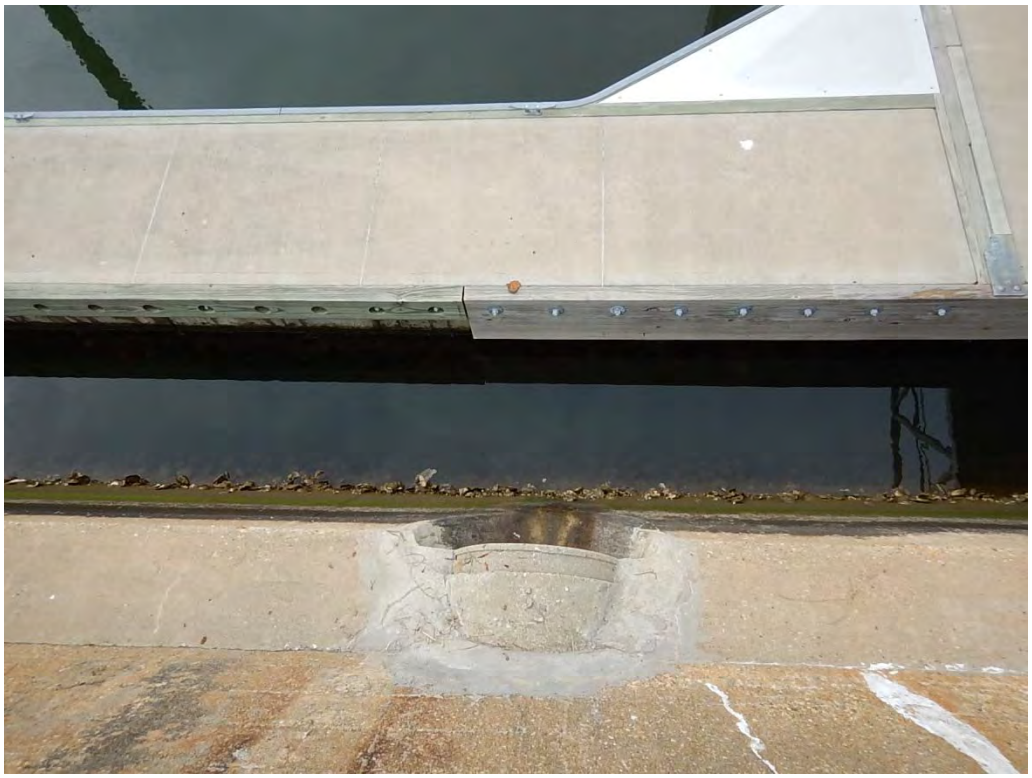
Photograph **17**	
Outfall # **055**	
Comments	

Photograph **18**	
Outfall # **058**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 19	
Outfall # 059	
Comments	
Photograph 20	
Outfall # 061	
Comments	

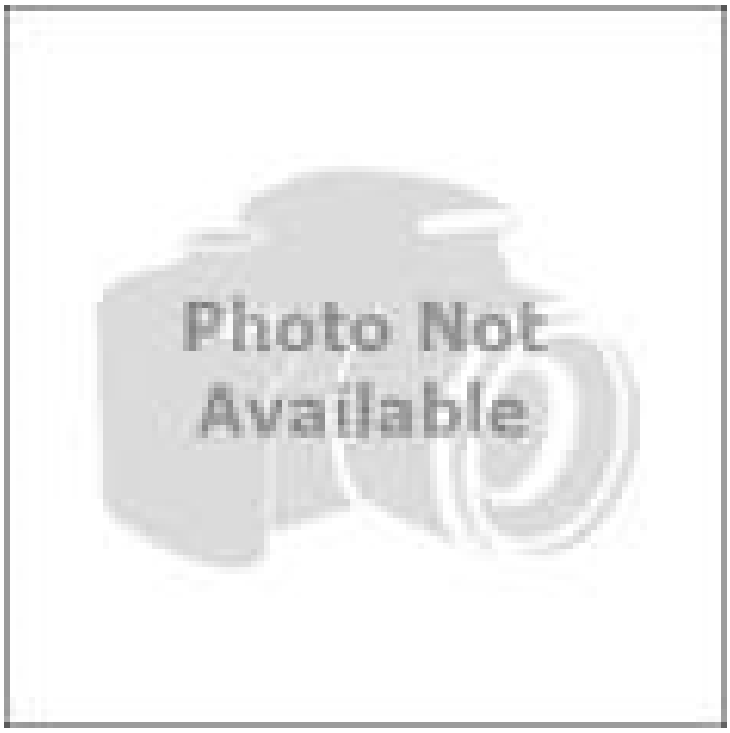
PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 21	
Outfall # 066	
Comments	
Photograph 22	
Outfall # 067	
Comments	

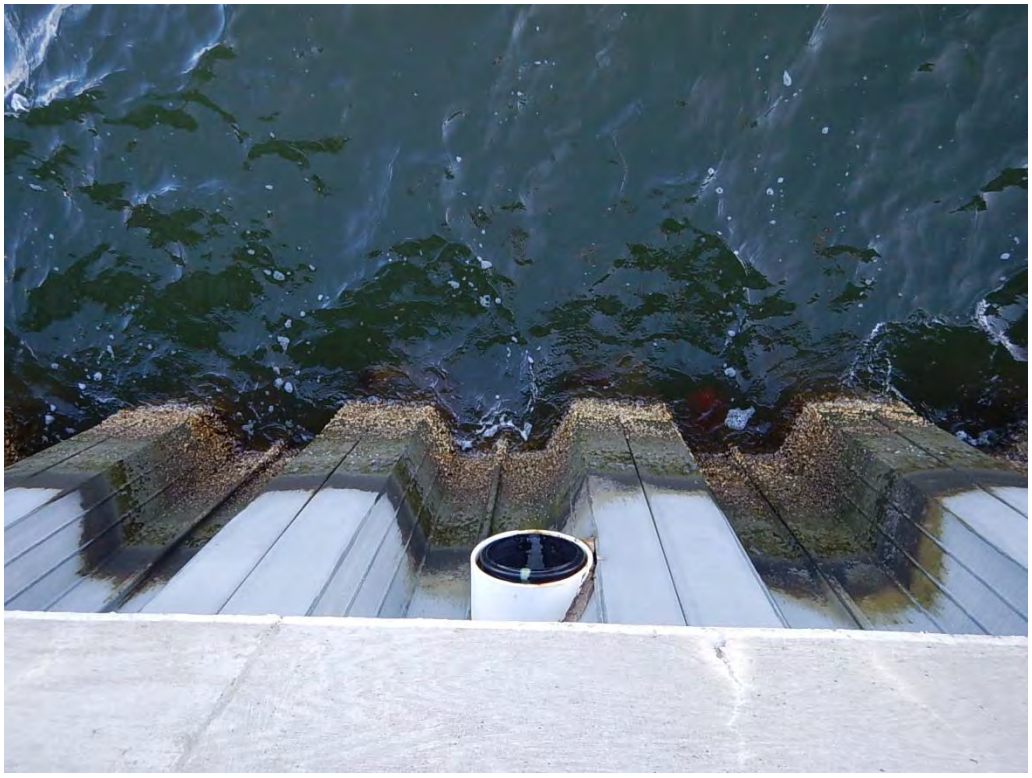
PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **23**	
Outfall # **074**	
Comments	
Photograph **24**	
Outfall # **075**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **25**	
Outfall # **076**	
Comments	
Photograph **26**	
Outfall # **078**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **27**	
Outfall # **083**	
Comments	
Photograph **28**	
Outfall # **089**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **29**	
Outfall # **091**	
Comments	
Photograph **30**	
Outfall # **094**	
Comments	

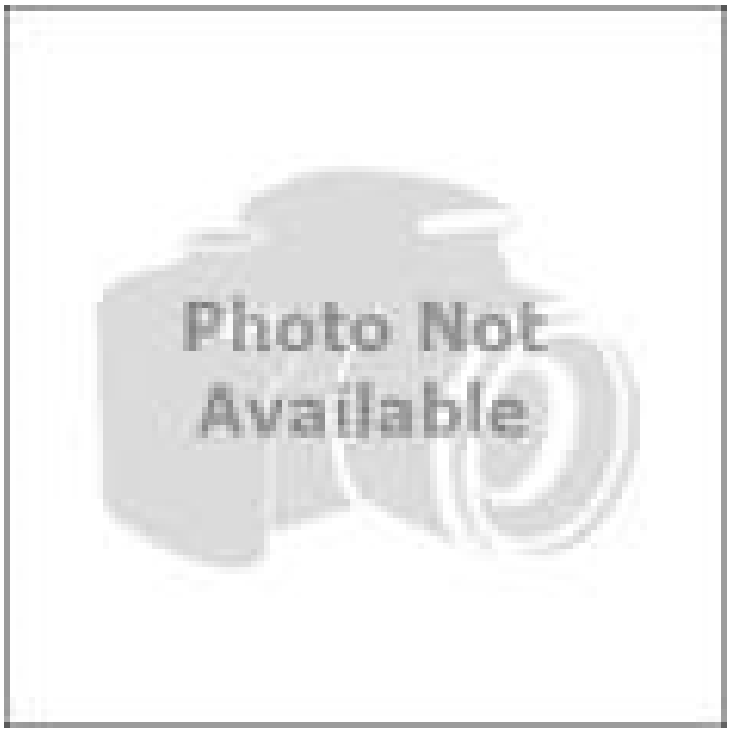
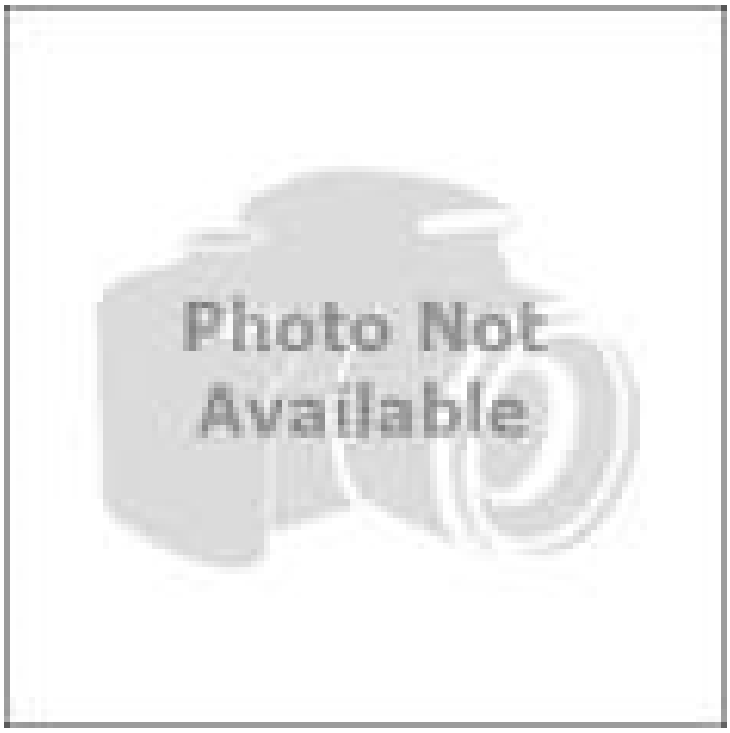
PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph **31**	
Outfall # **103**	
Comments **North of V-29 (under bulkhead).**	
Photograph **32**	
Outfall # **104**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **33**	
Outfall # **105**	
Comments	
Photograph **34**	
Outfall # **110**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **35**	
Outfall # **112**	
Comments	
Photograph **36**	
Outfall # **113**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **37**	
Outfall # **114**	
Comments	
Photograph **38**	
Outfall # **135**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **39**	
Outfall # **139**	
Comments	
Photograph **40**	
Outfall # **149**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph **41**	
Outfall # **205**	
Comments **On the other side of fence line along train tracks.**	
Photograph **42**	
Outfall # **206**	
Comments **On the other side of fence line along train tracks.**	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **43**	
Outfall # **207**	
Comments	
Photograph **44**	
Outfall # **208**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **45**	
Outfall # **300**	
Comments	
Photograph **46**	
Outfall # **326**	
Comments **Pool downstream of outfall.**	

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **47**	
Outfall # **327**	
Comments	

Photograph **48**	
Outfall # **328**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 49	
Outfall # 329	
Comments	
Photograph 50	
Outfall # 330	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **51**	
Outfall # **331**	
Comments	

Photograph **52**	
Outfall # **332**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **53**	
Outfall # **334**	
Comments	

Photograph **54**	
Outfall # **335**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **55**	
Outfall # **336**	
Comments	

Photograph **56**	
Outfall # **337**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 57	
Outfall # 338	
Comments	
Photograph 58	
Outfall # 339	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **59**	
Outfall # **346**	
Comments	

Photograph **60**	
Outfall # **347**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **61**	
Outfall # **348**	
Comments	

Photograph **62**	
Outfall # **352**	
Comments	

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PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **63**	
Outfall # **353**	
Comments	

Photograph **64**	
Outfall # **354/355**	
Comments	

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PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
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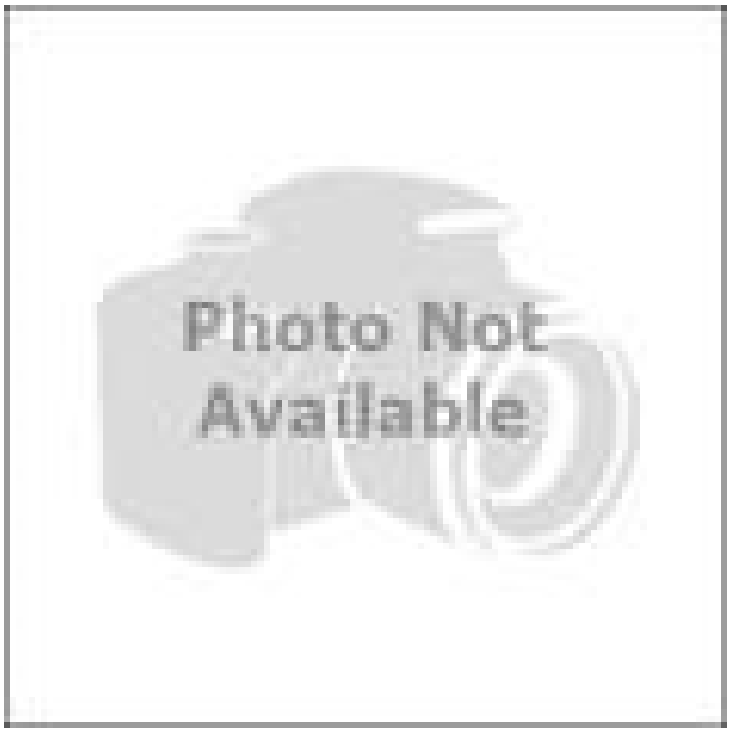
Photograph **65**	
Outfall # **400**	
Comments	

Photograph **66**	
Outfall # **401**	
Comments	

Michael Baker INTERNATIONAL

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **67**	
Outfall # **402**	
Comments	
Photograph **68**	
Outfall # **404**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 69	
Outfall # 407	
Comments	
Photograph 70	
Outfall # 408	
Comments	

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
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Photograph **71**	
Outfall # **409**	
Comments	

Photograph **72**	
Outfall # **410**	
Comments	

Michael Baker INTERNATIONAL

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Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **73**	
Outfall # **411**	
Comments	
Photograph **74**	
Outfall # **412**	
Comments	

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Photograph **75**	
Outfall # **413**	
Comments	

Photograph **76**	
Outfall # **414**	
Comments	

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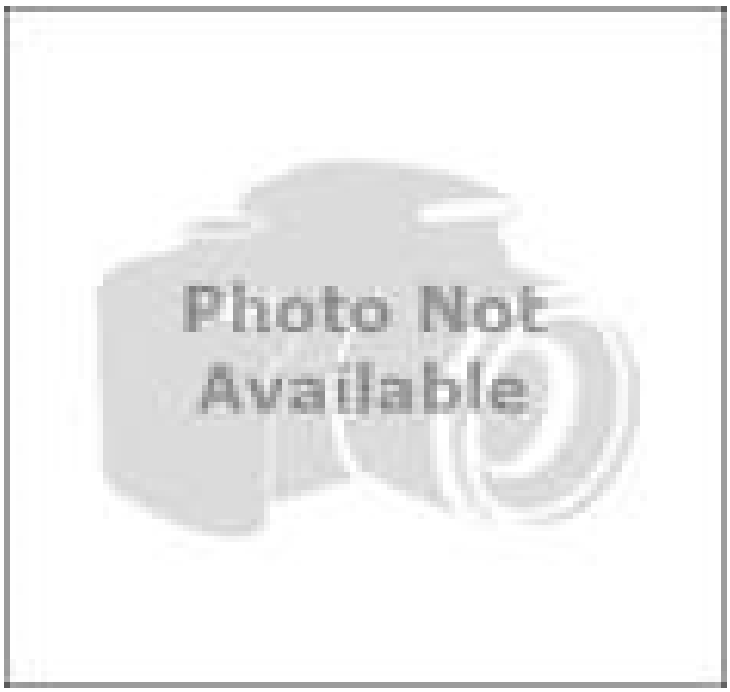
PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph **77**	
Outfall # **417**	
Comments	
Photograph **78**	
Outfall # **419**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **79**	
Outfall # **420**	
Comments	
Photograph **80**	
Outfall # **421**	
Comments	

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PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 81	
Outfall # 422	
Comments	
Photograph 82	
Outfall # 423	
Comments	

PHOTOGRAPHIC RECORD	
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Photograph **83**	
Outfall # **424**	
Comments	
Photograph **84**	
Outfall # **425**	
Comments	

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PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **85**	
Outfall # **426**	
Comments	

Photograph **86**	
Outfall # **427**	
Comments	

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PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **87**	
Outfall # **600**	
Comments	
Photograph **88**	
Outfall # **601**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 89	
Outfall # 602	
Comments	
Photograph 90	
Outfall # 603	
Comments	

PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
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Photograph **91**	
Outfall # **604**	
Comments	

Photograph **92**	
Outfall # **605**	
Comments	

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PHOTOGRAPHIC RECORD

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Photograph **93**	
Outfall # **606**	
Comments	

Photograph **94**	
Outfall # **607**	
Comments	

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PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 95	
Outfall # 608	
Comments	
Photograph 96	
Outfall # 609	
Comments	

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PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
2015 Outfall Inventory

Photograph **97**	
Outfall # **610**	
Comments	

Photograph **98**	
Outfall # **611**	
Comments	

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PHOTOGRAPHIC RECORD

Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update
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Photograph **99**	
Outfall # **612/613**	
Comments	

Photograph **100**	
Outfall # **614**	
Comments	

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PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update **2015 Outfall Inventory**	
Photograph **101**	
Outfall # **615**	
Comments	
Photograph **102**	
Outfall # **616**	
Comments	

PHOTOGRAPHIC RECORD	
Naval Station Norfolk – Stormwater Permit Inspections & SWPPP Update 2015 Outfall Inventory	
Photograph 103	
Outfall # 617	
Comments	

NASO Outfall Screening

3. OUTFALL SUMMARY

NAS Oceana includes seven regulated outfalls (001/901, and 002 through 007) and seven unregulated outfalls (008 through 0014). Each outfall was inspected as part of the 2015 SCE field effort. The purpose of the inspection was to evaluate each outfall for compliance with the provisions of the VPDES permit. The following items were noted at the regulated outfall:

(1) The date of the evaluation

(2) A description of the evaluation criteria used

(3) A list of the outfalls or on-site drainage points that were directly observed during the evaluation

(4) A description of the results of the evaluation for the presence of unauthorized discharges

(5) The actions taken to eliminate unauthorized discharges if any were identified

None of the outfalls exhibited indicators for pollution and no dry weather flows were observed. An Outfall Screening Summary is provided in Table 3-1. Completed Outfall Evaluation Forms are included as Appendix C.

Table 3-1 Outfall Screening Summary

Outfall	Industrial Activity*	Physical Indicators	Evidence of Pollutants	Recommendations / Notes
001 / 901	Bulk petroleum area, <90 day hazardous waste storage, aircraft taxiways, fuel transfer station, aircraft fueling and parking	None	None	None
002	Flightline areas, AFFF mobile unit activity areas	None	None	None
003	Fuel farm transfer station	None	None	None
004	Bulk petroleum area, fuel transfer station, aircraft/taxiway operations	None	None	None
005	Bulk petroleum areas, aircraft/taxiway operations	None	None	None
006	Bulk petroleum areas, aircraft/taxiway operations	None	None	None
007	Bulk petroleum areas, aircraft/taxiway operations	None	None	None
008	None	None	None	None
009	None	None	None	None
010	None	None	None	None
011	None	None	None	None
012	None	None	None	None
013	None	None	None	None
014	None	None	None	None

* Industrial activity per VPDES Permit No. VA0005266.

DNA Outfall Screening

3. OUTFALL SUMMARY

The one regulated outfall (001) at Dam Neck Annex was inspected as part of the field effort. The outfall discharges to Redwing Lake. Outfalls NR-005 NR-006 are upstream of, and drain to Outfall 001. All three outfalls were inspected. The purpose of the inspection was to evaluate the outfall for compliance with the provisions of the VPDES permit, which requires annual evaluation of regulated outfalls. Per Part III.D.2 of the permit, the following items were noted at the regulated outfall:

(1) The date of the evaluation.

(2) A description of the evaluation criteria used.

(3) A list of the outfalls or on-site drainage points that were directly observed during the evaluation.

(4) A description of the results of the evaluation for the presence of unauthorized discharges.

(5) The actions taken to eliminate unauthorized discharges if any were identified.

Annual evaluations of outfall 001 are conducted and documented as part of the regular SCE updates. Outfall 001 exhibited no indicators for pollution at the outfall and no dry weather flows were observed. Table 3-1 summarizes the results of the annual outfall evaluation for unauthorized discharges. Analytical monitoring for TSS, Total Recoverable Zinc and Total Recoverable Copper is conducted semi-annually at outfall 001.

Table 3-1 Outfall Screening Summary

Outfall	Industrial Activity	Physical Indicators	Evidence of Pollutants	Notes
001	Boat Building and Repairing	None	None	None
NR-005	Boat Building and Repairing	None	None	None
NR-006	Boat Building and Repairing / Service facilities for motor vehicle passenger transportation	None	None	None

Appendix G – Navy Spill Response and Reporting SOP; HR Installations

DOCUMENT NO.:

SOP-Spills-Regional-01

TITLE:

Hampton Roads Naval Installation Spill Reporting and Documentation Standard Operating Procedure

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7. ATTACHMENT 2-OPNAV 5090.1DAppendix C.....C-1
8. ATTACHMENT 3- Oil Spill Message Template.....D-1
9. ATTACHMENT 4- Hazardous Substance Spill Message Template.....E-1

DOCUMENT OWNER: NAVFAC MIDLANT Spill Program Manager	AUTHORIZED BY:

REV. NO.	EFFECTIVE DATE	DESCRIPTION OF REVISION
1	9/10/2010	ORIGINAL ISSUE
2	3/14/2011	REVISION
3	4/28/2011	ADDED EMS COVER SHEET
4	6/8/2011	REVISION
5	8/23/2011	REVISION
6	1/3/2012	REVISION
7	3/1/2012	REVISION
8	8/7/2012	REVISION
9	9/5/2012	REVISION
10	10/25/2012	REVISION- Added Attachment 2 and 3, Revised Reporting Matrices
11	10/15/2015	REVISION- Revised reporting matrices, added Foreign Garbage spill requirements.
	10/15/2015	Approval Signature: Tiffany Wilkerson, Director-EV11- Tiffany Wilkerson

Form EMS 1 (Revision A)

HAMPTON ROADS NAVAL INSTALLATION
SPILL REPORTING AND DOCUMENTATION
STANDARD OPERATING PROCEDURE

1) Purpose:

This Standard Operating Procedure (SOP) was created by NAVFAC MIDLANT Environmental and provides the reporting and documentation actions that must be taken in response to a spill/ release of oil, sewage, hazardous, or non-hazardous substance (solid or liquid) from a building, vessel, aircraft, etc. at any Hampton Roads Naval installation or annex (excluding spills at Norfolk Naval Shipyard, except those caused by NAVFAC entities). In this SOP, the term "spill" also includes gaseous releases of hazardous substances to the air, but does not pertain to radiological or infectious waste incidents.

This SOP will be updated by NAVFAC MIDLANT Environmental. For updates contact the Hampton Roads Spill Program Manager at 757-341-0390.

2) References:

(a) OPNAVINST 5090.1D & OPNAV M-5090.1, - Navy Environmental Readiness Program Manual.
(b) OPNAVINST F3100.6J, Special Incident Reporting (OPREP 3, Navy Blue and Unit SITREP) Procedures; (NOTAL).

3) Procedures and Responsibilities:

The following section outlines the responsibilities of the Responsible Party and/or the party who discovers the spill. Subsequent sections outline the responsibilities of Environmental staff.
The responsible party (RP) is the activity/ command that caused the spill.

a) <u>Party that discovers the spill/release shall:</u>

i) Determine the release source and stop it if safe to do so. **(If Untrained, or Unsure of Chemical, Avoid area and Contact the Emergency Communications Center (ECC)**
ii) If possible and safe to do so, prevent spills from entering storm drains or waterways. This can be accomplished by covering storm drains or pier drains or by diverting the spill using dikes or man-made berms.
iii) **Immediately** report the spill to the Emergency Communications Center (ECC), or applicable Emergency Service. **Contact information for each installation is listed in Table 1.**
-RP must pay for all cleanup and disposal costs
Note: The ECC contacts the base Fire Department, Command Duty Officer (CDO) and/or General Duty Supervisor (after hours), and Installation Environmental (EV). If required, the National Response Center (NRC) and Navy On-Scene Coordinator (NOSC) are also contacted.

The following spills must be reported to the Installation ECC:

(1) If the spill was a result of any operation conducted on the installation (including military personnel, contractors, tenants, civilians, etc.) outside or inside of a building and has

reached utility drains or the environment (air, land, water, or pavement) or provides a significant threat to reach utility drains or the environment, or is a threat to human health.

(2) Spills of **Regulated Garbage (Foreign Garbage)** must also be reported to the installation ECC to ensure proper regulatory reporting follows. **Regulated garbage (Foreign Garbage)** is any garbage that was on board, or removed from any means of conveyance during international movements. This includes food scraps, food wrappers, table scraps, food refuse and wrappers from passenger and crew quarters, and unconsumed meals that were available for passengers and crew which were not consumed. Garbage that is commingled with **regulated garbage** also becomes **regulated garbage**.

(3) Indoors- **Any Hazardous Substance spill** (PCB's, Mercury, Methyl Ethyl Ketone (MEK), etc. that meet the applicable Reportable Quantity (RQ) threshold), or **ANY** spill that has reached a floor drain, or exited the building.

iv) **Navy Message**- The Responsible Party or Pier SOPA (if responsible party has not been determined) has 24 hours to generate a Navy Spill Message if any the following occurs per **Reference (a):**

(1) If the spill requires outside agency reporting.
(2) Any discharge of oil has reached the water or storm drain.
(3) Any oil or Hazardous Substance spill that may endanger critical water areas, has the potential to generate public concern, become the focus of an enforcement action, or pose a threat to public health or welfare that warrants an operations event and OPREP-3 special incident report as per **Reference (b).**
(4) Sewage spills or other pollutants which endanger critical water areas, have the potential to generate public concern, become the focus of enforcement action, or pose a threat to public health or welfare shall be reported by OPREP-3 NAVY BLUE or OPREP-3 NAVY UNIT SITREP in accordance with **Reference (b)**. Spills of oil and hazardous substances shall be reported in accordance with the requirements in **Reference (a)** Chapter 39, using formats in Appendix C.
(5) If original spill information differs as per **Reference (a)**, or if spilled amount differs by more than 50% of original Message, then an updated Message must be generated.6) Spills, leaks, and unauthorized discharges involving pesticides and their application.

***Required formats for oil, hazardous substance, AFFF spill messages- Attachment 2 (OPNAV 5090.1D, Appendix C). For sewage spill messages, see reference (b).**

The following section outlines the duties of Environmental personnel:

b) **<u>EV Procedures:</u>**

i) Once release (or threat of a release) is determined, ECC is immediately contacted by the Responsible Party or discoverer of spill. If spill is discovered by EV staff, the EV staff member makes the notification call to ECC. If EV was contacted in lieu of ECC, the person discovering the spill will be directed to contact ECC with the pertinent information.
ii) Once an Environmental Protection Specialist (EPS) receives notification of a spill from ECC, he/she will contact the caller who made the spill report and/or report to the scene of the spill. If needed, CDO and NOSC (if applicable) also respond to spill scene.

iii) EPS, in conjunction with CDO, conducts preliminary investigation as to the extent and cause of the spill. When appropriate, Hampton Roads Spill Manager (SM) along with Installation Environmental Program Director (IEPD) conducts a more in-depth investigation.

iv) Using the acquired spill information, the EPS determines the reporting and documentation requirements for the spill utilizing the matrix presented later in this SOP. An explanation/discussion of the reporting requirements and documentation is listed in the matrix **(Attachment 1)**.

v) EPS notifies SM of all reportable spills and any hazardous materials spills **(see Attachment 1)**.

vi) EPS notifies the state/local regulatory authorities and the applicable installation Media Manager(s) (MM). If the reporting/notification requirements are unclear, EPS will contact the SM and together they will ensure each regulatory agency's reporting requirements are being met. The proper communication channels will be followed to ensure the various MMs fulfill additional regulatory reporting requirements not identified in the matrix below.

vii) EPS provides on-site guidance for spill clean-up when necessary. EPS, CDO, or a Duty General Foreman determines if additional assistance from Environmental Services or other resources are needed to clean up the spill. CDO or Duty General Foreman contacts the Environmental Service Desk as needed for Oil or Hazardous Substance releases (757-341-0412) or Utilities for sewage releases. The Service Desk dispatches NAVFAC Oil Recovery or Hazmat personnel, as appropriate. If oil spill is >100 gallons and NOSC is not on-site or was obviously not contacted by the ECC, the EPS or CDO should contact the NOSC immediately at 757-636-4378.

viii) Upon commencement of any oil recovery activities, Oil Recovery will supply an initial incident and cost logistics report to the Oil Recovery Commodity Manager as soon as practicable or within six hours of discovery of spill, if feasible. The Commodity Manager will then supply information to the Installation Environmental Program Director (IEPD) and SM as soon as practicable. This initial report may include such summarized information as: spill discovery timeline, estimated volume spilled, any completed and ongoing recovery operations, and estimated clean-up costs to date. During ongoing recovery efforts, a daily summary will also be provided at the end of each day with updated/additional information. At the conclusion of the recovery activities, a final spill summary will be provided (through the chain of command, as noted), which shall contain the final amount of recovered product, final clean-up costs, and any updated or additional observed information. ***CNRMA Hazardous Waste disposal JON shall NOT be used for spill clean-up billing.**

ix) If required, EPS informs the RP of their obligation to generate a Navy Spill Message in proper format within 24 hours (see Message Formats in Responsible Party's Duties). In the event that the RP cannot be determined, EPS informs the CDO or Pier SOPA **(Reference a)** of their responsibility to submit the Navy Spill Message. EPS will communicate to the message generator the estimated clean-up costs and recovered volume (if available) so the message will be as complete as possible. If specifics are unknown, the initial message must not be delayed and an updated Message may be released as additional information becomes available.

x) IEPD, EPS, and SM should follow up with CDO or Pier SOPA to ensure they have released initial Navy message within 24 hours of discovery. Additionally, it is the IEPD's responsibility to inform the message author if an updated message is required. If original spill information differs as per **(References a or b)** or if spilled amount differs by more than 50% of original message, then an updated message must be generated.

xi) EPS is to make initial notifications to appropriate regulators (except HRSD) as per the agency's preferred reporting method within 12 hours of the discovery of the spill. Initial notifications should include other agency incident numbers (such as NRC numbers) for cross-

referencing by the regulators. See **Spill Reporting** section for important reporting procedures.

xii) EPS must draft the DEQ 5-day spill report and submit to the IEPD for review, finalization, signatures, and distribution to the appropriate regulatory agencies within the established deadline. Impacted MM for the installation where the spill occurred is responsible for all communication with HRSD and for follow-up regulatory reporting regarding releases to the sanitary sewer system.

xiii) The Emergency Planning and Community Right-to-Know Act (EPCRA) program manager (PM) is primarily responsible for any necessary EPCRA (SERC and LEPC) reporting. Any correspondence of this nature should be forwarded to the SM and installation EV staff.

xiv) SM and MMs will continue regulatory communications as appropriate and provide updated information when/if it becomes available.

xv) If regulatory enforcement action is imposed, SM and MMs will comply with communication requirements.

xvi) EPS files all spill documents together in the appropriate reportable or non-reportable spills folder/binder.

Table 1			
INSTALLATION	**Emergency Contact**	**CDO**	**Environmental**
NWS Yorktown Cheatham Annex Yorktown Fuels	**757-887-4911** (ECC)	757-268-6250	757-887-4086 or 757-887-4881 or 757-636-4494 or 757-887-4095
Naval Air Station Oceana Dam Neck Annex Naval Auxiliary Landing Field Fentress	**911** (ECC)	757-433-2366	757-433-3435 or 757-433-3437 or 757-433-3439 757-433-2131
Dare County Bombing Range	**911** (Local Emergency Services)	757-433-2366	757-421-8114 757-433-3435 or 757-433-3437 or 757-433-2131 after hours: 757-636-4256 or 757-943-0991
Defense Fuel Support Point Craney Island (see DFSP Craney Island's 'Red Plan')	**757-444-3333** (NSN ECC)	757-438-3860	757-341-0516 or 757-341-0523
Joint Expeditionary Base Little Creek	**757-462-4444** (ECC)	757-462-7385 or 757-438-3930	757-462-5350 or 757-462-5361 or 757-462-5355 757-462-5356
Joint Expeditionary Base Fort Story	**757-422-7141** (ECC)	757-462-7385or 757-438-3930	757-422-7344 ext 225 or 757-462-5353 or 757-462-5361
Naval Station Norfolk	**757-444-3333** (ECC)	757-438-3860	757-341-0523 or 757-341-0516 After hours notification 757-635-5740
Naval Support Activity Hampton Roads	**757-444-3333** (ECC)	757-438-3402	757-836-1862
Norfolk Naval Shipyard St. Juliens Creek Annex Scott Center Annex Southgate Annex	**757-396-3333** (NNSY ECC)	757-396-3222	757-396-8270
St. Helena Annex	**911** (Local Emergency Services)	757-396-3222	757-396-8270
Naval Support Activity Northwest	**911** (Chesapeake Emergency Services)	757-438-3503	757-421-8114 or 757-650-7286 after hours: 757-636-4256 or 757-943-0991
ROTHR New Kent	**757-887-4911** (ECC)	757-268-6250	757-887-4086 or 757-887-4881
Naval Medical Center Portsmouth	**757-396-3333**	757-396-3222	757-396-8270

Attachment 1

REPORTING/DOCUMENTATION MATRIX

Material Spilled: Sewage/Grey-Water				
Spill Caused By	**Area Affected**	**Volume Spilled**	**EV Reporting Requirements**	**Navy Documentation**
All Cases	State Waters Storm Drains	Any Quantity	DEQ Reporting NRC Reporting **5 Day Letter**	Navy OPREP **(OPNAV 5090.1D Ch. 20)** Logbook Spill Folder
All Cases	Land	≥500 Gallons	NRC Reporting DEQ Reporting **5 Day Letter**	Navy OPREP **(OPNAV 5090.1D Ch. 20)** Logbook Spill Folder
All Cases	Land	< 500 Gallons	None	Logbook Spill Folder
Material Spilled: Oil				
Spill Caused By	**Area Affected**	**Volume Spilled**	**EV Reporting Requirements**	**Navy Documentation**
All Cases	State Waters Storm Drains	Any Quantity	NRC Reporting **5 Day Letters**	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
POV	Land	<25 Gallons	None	None
Navy	Land	<25 Gallons	None	Logbook Spill Folder
All Cases	Land	≥25 Gallons	NRC Reporting **>150 Gallons= 5 Day Letters**	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
Note: All oil spills greater than 100 gallons require Navy On-Scene Coordinator notification.				
Air Releases				
Spill Caused By	**Area Affected**	**Volume Spilled**	**EV Reporting Requirements**	**Navy Documentation**
Air Releases of Refrigerants or Halons	Air	Any Quantity	Air Program Manager	Logbook
Air Releases of Ammonia	Air	Any Quantity	Air Program Manager & EPCRA Manager	Logbook
Air Releases of Hazardous Substance	Air	≥Reportable Quantity	Air Program Manager & EPCRA Program Manager	Logbook
Excess Air Emissions	Air	1 Hour or More	Air Manager	Logbook

Material Spilled: AFFF				
Spill Caused By	**Area Affected**	**Volume Spilled**	**EV Reporting Requirements**	**Navy Documentation**
All Cases	State Waters Storm Drains	Any Quantity	DEQ Reporting	Navy Message **(Appendix C)** Logbook Spill Folder
All Cases	Sanitary Sewer	Any Quantity	Water Program Manager (WPM) HRSD (reporting by WPM)	Navy Message **(Appendix C)**Logbook Spill Folder
All Cases	Land	Any Quantity	DEQ Reporting	Navy Message **(Appendix C)** Logbook Spill Folder

Material spilled : Hazardous Substance/Hazardous Waste				
Spill Caused By	**Area Affected**	**Volume Spilled**	**EV Reporting Requirements**	**Navy Documentation**
All Cases	State Waters Storm Drains	Any Quantity	DEQ Reporting NRC Reporting NOSC	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
All Cases	Sanitary Sewer	Any Quantity	Water Program Manager HRSD (by WPM)	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
All Cases	Land	≥Reportable Quantity (for spilled substance)	DEQ Reporting NRC Reporting LEPC NOSC	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
All Cases	Land	<Reportable Quantity (for spilled substance)	None	Logbook Spill Folder
Hazardous Waste	All Cases	Any Quantity	HW Media Manager (DEQ Reporting) *****If ≥ Reportable Quantity: NRC Reporting	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
CERCLA Haz Substances, EPCRA Toxic Chemicals, and EPCRA Extremely Haz Substances	All Cases	≥Reportable Quantity***** (for spilled substance)	DEQ Reporting NRC Reporting EPCRA MM will Notify: LEPC NREMDNOSC	Navy Message **(OPNAV 5090.1D Appendix C)** Logbook Spill Folder
Material Spilled: Foreign Garbage				
Any Cause	All Cases	Any Quantity	US Customs and Border Patrol by Phone	Logbook Spill Folder

Note 1: DEQ Reporting = 24 hour initial notification and follow up 5-DayLetter
Note 2: NRC reporting must occur **immediately** upon discovery of spill

Attachment 1

***Reportable Quantity (RQ)**

The reportable quantity is the federally determined amount of a hazardous substance that when released in a 24 hour period is used to determine when spills have to be reported; any spill involving an amount of a hazardous substance greater than or equal to its reportable quantity value must be reported. The EPCRA PM is responsible for providing support to the installation environmental staff for RQ calculations and necessary EPCRA (SERC and LEPC reporting). Any correspondence of this nature should be forwarded to the SM and EPCRA PM.

Navy Message

EPS is to notify responsible party of their duty to generate a Navy message regarding the spill incident in proper format within 24 hours (see Message Formats in responsible party's Duties). In the event that the responsible party cannot be determined, EPS informs the CDO or Pier SOPA (as applicable) of their responsibility to deliver the message. EPS will communicate the estimated clean-up costs and recovered volume (if available) so the message will be complete. If specifics are unknown, the initial message must not be delayed and an updated message may be released as additional information becomes available.

IEPD and SM are to ensure that the responsible party releases initial Navy message within 24 hours of discovery of spill and in proper format. Additionally, it is their responsibility to inform the message author if an updated message is required. If original spill information differs significantly (i.e., spilled amount differs by more than 50% of original message), then an updated message must be submitted.

A copy of the Navy message should be made for environmental recordkeeping and to ensure that the correct format has been used per **References (a)** and **(b)**. Also see previous section on Navy messaging.

Spill Reporting

EPS is to provide or ensure spill reporting to Virginia Department of Environmental Quality (DEQ). Spill reporting includes both an initial report of the spill within 24 hours of spill discovery (which presents awareness of the spill) and a 5-day Spill Letter (which documents specific details). Provided NRC has been notified, this meets the initial DEQ reporting requirement.

Initial spill report can be made within 24 hours of the spill discovery on the DEQ Reporting Website. Once the report is submitted, a WEB Reference ID Number (not the same as an Incident Report number) will be populated and must be recorded as proof of notification (recommend printing this page to an electronic file). Following incident submittal, an Incident Report number (IR#) will be generated by the DEQ . The IR# or Web Reference number should be used in all remaining correspondence pertaining to that incident. If initial DEQ requirement is met by the NRC reporting, EPS must e-mail DEQ to obtain the IR or Reference number.

In certain situations for oil spills <150 gallons, but >25 gallons the DEQ may not generate an IR# and may not require a follow-up 5-day Spill Letter. In this instance, EPS is to keep a hardcopy of the ruling or request something in writing for EV documentation.

If a 5-Day Spill Letter is required, it must be submitted to DEQ within 5 calendar days of discovery of the spill. These letters should contain a brief explanation of the following:

→Date of Release/Discovery	→Quantity Released
→Time of Release/Discovery	→Quantity Recovered
→Location	→Receiving Waterway
→Substance Released	→Cause of Release
→NRC # (if applicable)	→Cleanup Actions Taken

Attachment 1

The preferred method of delivery to DEQ is electronic. An email attachment of the document to troprep@deq.virginia.gov will suffice and no paper copy is required for follow-up. Original signatures are not required by DEQ, although digital signatures are to be used at the discretion of NAVFAC. The point of contact (POC) information for regulatory spill reporting is shown below:

VDEQ	•John Settle (POC)	--- --- **757-518-2179**	http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspxtroprep@deq.virginia.gov john.settle@deq.virginia.gov
US Customs and Border Patrol		**757-533-4225**	**Immediate Telephone Notification**
NRC		**1-800-424-8802**	**Immediate Telephone Notification** http://www.nrc.uscg.mil/

Note: This contact information is subject to change at any time, and should be updated as needed.

National Response Center (NRC)

The NRC is the federal agency that collects information on oil spills that enter waterways and storm drains. The NRC must be notified immediately upon discovery of spill by phone:
1-800-424-8802

The ECC will report all applicable spills to the NRC prior to sending EV a spill report.

Each spill that is reported to the NRC is assigned a unique NRC spill number; this NRC number is recorded on the spill notification form that the ECC will fax to EV. The presence of this number can therefore be used as a confirmation that the NRC has received a spill report. **This number should also be noted in the Navy Spill Message**. If the NRC spill number is not present, the EPS is to contact the ECC to verify if the NRC was notified. If they have not been notified, EPS should ensure that the NRC is notified immediately.

Logbook

A hand-written spill logbook is kept at each installation to quickly reference spills and to ensure all necessary actions are taken for each spill. This logbook is used to track both reportable and non-reportable spills. The EPS is to enter spill information into the logbook as it is obtained so that the logbook can be used as a checklist to ensure that all necessary spill response actions are taken for all spills.

Local Emergency Planning Committees (LEPCs)

LEPCs are groups of local officials from various disciplines formed to enforce the requirements of EPCRA. LEPC develops local emergency response plans based on local activities, business, etc.

State Emergency Response Commission (SERC)

The SERC oversees the implementation of the EPCRA requirements in each state.

APPENDIX C

MESSAGE FORMATS

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C-1 Notices of Violation C-1

C-2 Hazardous Substance Release Report C-6

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C-1 Notices of Violation

a. One written notice, regardless of the number of individual violations, findings, or citations, counts as one notice of violation (NOV), unless more than one environmental media is cited. Do not include items found to be out of compliance by a regulator but not set forth in writing.

b. If the NOV cites violations in more than one environmental media, it will be counted as multiple NOVs, one under each of the applicable media categories. Only one message is required; however, include specific information in the message separately for each environmental media. As outlined in section C-1.2, make steps 1 through 9 of this message the same for each of the different media violations that result from a multimedia inspection. Repeat steps 10 through 25 with detailed information for each different environmental media cited.

C-1.1. General Guidelines for Preparing the Following Messages

a. If the line item is a question, do not answer just "yes" or "no." Provide a response with the assumption that the reader does not have access to this document. For example, if Item 14 of the close-out message asks, "Was a fine assessed or requested?," the response in line 14 of the message would then read, "No, fine was assessed," instead of "No."

b. If the line item is a phrase, repeat or paraphrase the phrase followed by the response. For example, if Item 12 of the initial information message reads, "Date of inspection (mm/dd/yy)," the response in line 12 of the message would then read, "Date of inspection: 03/05/11," instead of "03/05/11."

C-1.2. Required Initial Information on NOVs/Significant Non-Compliances

FROM: NAVY INSTALLATION//CODE//

TO: CNO WASHINGTON DC//N45//
CHAIN OF COMMAND
NAVY REGIONAL ENVIRONMENTAL
COORDINATOR//JJJ//

INFO: NAVFAC EXWC PORT HUENEME CA//424//
NAVFACENGCOM//ENV//
NAVFACENGCOM FEC//JJJ//
//UNCLAS //N05090//

SUBJ: RECEIPT OF NOTICE OF ENVIRONMENTAL VIOLATION

MSGID/GENADMIN/ORIGINATOR//CODE//
REF/A/DOC/OPNAV M-5090.1//
RMKS/

1. Installation name in violation.

2. Navy unit identification code (UIC) number.

3. State (use two letter state abbreviations).

4. Point of contact for additional information.

5. Point of contact telephone number.

6. Point of contact e-mail address.

7. Budget submitting office (BSO).

8. Environmental Protection Agency (EPA) region.

9. Name of issuing agency and violation number(s).

10. Identify the environmental media cited in the violation notice. This refers to the law under which the violation was issued. If a state or local violation is received, report under the applicable Federal statutes from which the state law or local regulation was derived.

11. Date of notification (mm/dd/yy). The date the regulatory agency initiated the NOV (preferably the date on the letterhead).

12. Date of inspection (mm/dd/yy). The date of the inspection during which the violation was detected. If the inspection took place over several days use the date noted on the NOV or the date the inspection started.

13. Was the NOV a result of a self-inspection or reporting? Y or N

14. Description of NOV.

15. Classify the violation cited into one of the following categories. Note: For multiple violations cited under an NOV, use the category that applies to the highest threat. Descriptions and examples are included in section C-1.4.

a. Class A: Release to the environment

b. Class B: Potential to cause release or damage to the environment

c. Class C: Administrative

16. Root Cause. Choose one of the root causes listed in table C-1 at the end of this appendix. Note: For multiple root causes, select the largest contributor and cite the remainder under Comments.

17. Was a fine assessed or requested? Y or N

18. Dollar amount of fines assessed. Total dollar amount of the fine assessed.

19. Dollar amount of fines paid to regulatory agency.

20. Nature of response required and date due (mm/dd/yy) to the regulatory authority (e.g., regulator requests answer to complaint by 09/25/11).

21. Provide date installation corrected all violations (mm/dd/yy).

22. Is the NOV resolved? Y or N

23. Date of NOV resolution (mm/dd/yy).

24. Has the issuing agency closed the NOV? Y or N

25. Date of concurrence by the regulator (mm/dd/yy).

26. Date of last annual installation inspection and BSO inspection. Was the discrepancy noted during these inspections?

27. Comments (i.e., additional information, unusual circumstances or events leading to NOV).

Note: If the NOV is closed within 3 months of the NOV issue date, then no quarterly status message is required.

C-1.3. Required Follow-Up Information on NOVs/Significant Non-Compliances. A follow-up message is required on a quarterly basis for each open NOV/significant non-compliance for which an initial message was sent under section C-1.2.

```
FROM:          NAVY INSTALLATION//CODE//

TO:       CNO WASHINGTON DC//N45//
               CHAIN OF COMMAND
               NAVY REGIONAL ENVIRONMENTAL
         COORDINATOR//JJJ//

INFO:          NAVFAC EXWC PORT HUENEME CA//424//
               NAVFACENGCOM//ENV//
         NAVFACENGCOM FEC//JJJ//
               //UNCLAS //N05090//

SUBJ:          NOTICE OF ENVIRONMENTAL VIOLATION RESPONSE PLAN

         MSGID/GENADMIN/ORIGINATOR//CODE//
         REF/A/DOC/OPNAV M-5090.1//
         RMKS/
```

1. Installation name in violation.

2. Navy UIC number.

3. State (use two letter state abbreviations).

4. Point of contact for additional information.

5. Point of contact telephone number.

6. Point of contact e-mail address.

7. BSO.

8. EPA region.

9. Name of issuing agency and violation number(s).

10. Identify the environmental media cited in the violation notice. This refers to the law under which the violation was issued. If a state or local violation is received, report under the applicable federal statutes from which the state law or local regulation was derived.

11. Date of original notification (mm/dd/yy). The date the regulatory agency initiated the NOV (preferably the date on the letterhead).

12. Root Cause. If additional analysis results in a different root cause, choose one of the root causes listed in table C-1. Note: For multiple root causes, select the largest contributor, and cite the remainder under Comments.

13. Reason for open NOV.

14. Was a fine assessed or requested?

15. Dollar amount of fines assessed. Total dollar amount of the fine assessed.

16. Dollar amount of fines paid to regulatory agency.

17. Provide date installation corrected all violations (mm/dd/yy).

18. Is the NOV resolved? Y or N. For final resolution, an NOV requires the satisfaction of the issuing agency. Note: All individual findings, violations, or citations within the NOV must be resolved for the NOV to be considered resolved.

19. Date of NOV resolution (mm/dd/yy).

20. Date of concurrence by the regulator (mm/dd/yy). The date on which the regulatory agency confirms that all findings are resolved. Notification may be in formal written form or a documented conversation.

21. Estimated completion date for issues not yet corrected (mm/dd/yy).

22. Summary of reasons for not resolving the identified issues.

23. Is a compliance project required to achieve compliance with the NOV?

24. Has an environmental program requirement or military construction project been submitted and in what year?

25. Comments (i.e., additional information, unusual circumstances or events leading to the NOV).

26. Original Naval Message Number (Date and Time Group – day, zulu time, month, and year).

C-1.4. NOV Class Code Descriptions

a. Class A - Release to the Environment. The NOV resulted from spills, overflows, or other unauthorized discharges or releases. This category includes NOVs that resulted from wastewater or stormwater discharges that exceeded effluent limits, air emissions that exceeded emission standards, or potable water samples that exceeded primary drinking water standards.

b. Class B - Potential to Cause Release or Damage to the Environment. This category includes NOVs resulting from inspections that note conditions with potential for release or damage to the environment such as improper storage or handling of waste or regulated substances (e.g., oil, hazardous materials).

c. Class C - Administrative. The NOV resulted from administrative errors such as failure to submit or update, complete in a timely manner, or properly prepare required permit applications, monitoring or compliance reports, and plans. This category also includes improper or incomplete documentation of waste storage and disposal and notifications required in advance of taking action.

C-2 Hazardous Substance Release Report

C-2.1. Precedence (for messages only). Provided that prior voice reports have been made both to the U.S. Coast Guard (USCG)

National Response Center (NRC) and the reporting command's chain of command, use "Routine" precedence for Hazardous Substance (HS) Release Report Messages not classified as an extremely hazardous substance (EHS). If either voice report has not been made, use "Priority" precedence. If EHS, always use "Priority" precedence.

C-2.2. Classification or Special Handling Marks. HS Release Report Messages are unclassified and do not warrant special handling marks unless classified or sensitive business information must be incorporated. Avoid inclusion of such information to the maximum extent possible to allow HS Release Report Messages to be handled on a solely unclassified basis.

C-2.3. Correcting HS Release Report Messages. HS Release Report Messages should be updated with a follow-up message as soon as the reporting activity becomes aware of new information concerning the origin, amount, nature of substance, type of operation at source or root cause, or lessons learned of release. Similarly, if the final estimate of the amount released differs substantially from the amount initially reported, the reporting activity must send an update message to all action and info addresses on the original message.

C-2.4. Action and Info Addressees

FROM: Navy activity/ship responsible for or discovering spill

TO: Navy On-Scene Coordinator
Chain of Command

INFO: Area Environmental Coordinator
Host Activity
CNO WASHINGTON DC//N45//
CNIC WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
NAVFAC EXWC PORT HUENEME CA//424//
NAVJAG WASHINGTON DC//11//
[Add NRC for releases into or upon the navigable waters of the United States, its contiguous zone (generally within 12 nautical miles (NM) of U.S. shores), and adjacent shorelines.]
COAST GUARD NATIONAL RESPONSE CENTER WASHINGTON DC//JJJ//

C-2.5. Body of Report. Use the following format for the body of all HS Release Report Messages. It is important for data management purposes that the format be followed.

UNCLAS//N05090//
SUBJ: HAZARDOUS SUBSTANCE RELEASE REPORT (MIN: CONSIDERED)
MSGID/GENADMIN/ORIGINATOR//
RMKS/

1. LOCAL TIME AND DATE RELEASE [OCCURRED/DISCOVERED].

2. [FACILITY/VESSEL] ORIGINATING RELEASE:

a. For Navy ships, list ship name and hull number.

b. For Navy shore facilities, list facility name.

c. For release occurring during transportation, list name of activity responsible for shipment.

d. For non-Navy spills, list name of the responsible party, if known.

e. For organizations under contract to Navy, list firm name and contracting Navy activity.

f. If the source is unknown at time of this report, list only "Unknown" until such time as definitively established.

3. RELEASE LOCATION:

a. For release at sea, list latitude, longitude, and distance to nearest land.

b. For release in port, list port name, host naval command (NAVSTA, Shipyard), and specific location.

c. For release ashore, list city, state, facility name, and specific location (building designation).

d. For release during transportation, give exact location (highway mile marker or street number and city).

4. AMOUNT RELEASED:

a. Use convenient units of weight or volume (e.g., kg, lb, gal, liters).

b. For continuous release, estimate rate of release and amount left in container.

c. Estimates should be made by examining loss at source (e.g., checking the sounding tank, calculating flow rate of spill).

d. Unreliable estimates of volume using visual observation of HS on water may not be reported here.

e. If amount unknown at time of this report, list only "Unknown" until such time as definitively established.

5. HAZARDOUS SUBSTANCE RELEASED:

a. If EHS, headline this paragraph "EXTREMELY HAZARDOUS SUBSTANCE RELEASED:" Refer to chapter 39 (Oil and Hazardous Substance Spill Preparedness and Response) section 39-3.6.a for additional notification requirements.

b. Consult container labels, user directions, reference books, and experts for advice.

c. Provide chemical and product names, formula, synonym, physical and chemical characteristics, and inherent hazards. For example, "Container label identifies substance as acrylonitrile. Synonyms: cyansethylene, vintleyanide. Characteristics and hazards: poisonous liquid and vapor, skin irritant, highly reactive or flammable."

d. Describe appearance, physical and chemical characteristics, and actual or potential hazards observed. For example, "Substance released is colorless to light yellow unidentified liquid; highly irritating to eyes and nose; smells like kernels of peach pits; vaporizing quickly, posing ignition problem."

6. TYPE OF OPERATION AT SOURCE: Plating shop, painting shop, hazardous waste (HW) facility, truck, ship, pipeline, ship rebuilding, entomology shop, etc.

7. CAUSE OF RELEASE:

a. Provide narrative description of specific cause of release.

b. Account for personnel error, equipment failure, etc., directly contributing to release. For example: "Railing supporting 55-gal drums on a flatbed truck gave way because it was not securely fastened, causing seven drums to fall and rupture."

c. If cause unknown at time of this report, list only "Unknown" until such time as definitively established.

8. TYPE OF CONTAINER FROM WHICH SUBSTANCE ESCAPED:

a. 55-gal drums, 5-lb bags, tank truck, storage tank, can, etc.

b. Estimate number of containers damaged or dangerously exposed.

9. RELEASE ENVIRONMENT:

a. Describe scene of release.

b. Include information on physical characteristics, size and complexity of release, and weather conditions. For example: "Solvent released formed shallow pool covering area about 30 ft by 45 ft of bare concrete. Solvent slowly running into storm drain. Pool emitting highly toxic, flammable vapors. Dark clouds threatening rain. Light wind drifting vapors northbound to residential area about 30 ft above ground."

10. AREAS DAMAGED OR THREATENED:

a. Describe actual and potential danger or damage to surrounding environment.

b. Identify body of water, area, or resources threatened or affected.

c. Describe nature and extent of damage to property, wildlife, or other natural resources (if any).

11. NOTIFICATIONS MADE AND ASSISTANCE REQUESTED:

a. List all organizations informed of release within and beyond Navy jurisdiction. Include Navy, Federal, State, and local authorities, response teams, fire departments, hospitals, etc.

b. Specify type of assistance requested from these organizations.

c. If telephonic report to NRC made, list: Date, time, group of telephonic report; NRC report and case number; name of NRC official taking report; quantity of HS released; and Navy command making telephonic report.

12. FIELD TESTING: Indicate findings and conclusions as to concentration, pH, etc.

13. CONTROL AND CONTAINMENT ACTIONS [PLANNED/TAKEN]:

a. If none, explain why.

b. Specify method used to control and contain release. For example: "Gas barriers used to control and contain vapor emissions. Runoff contained by excavating ditch circumscribing affected area."

14. CLEAN-UP ACTIONS [PLANNED/TAKEN]:

a. If none, explain why.

b. Identify on-site or off-site treatment, method used, parties involved in clean-up and removal, and disposal area. For example: "No clean-up action taken. Toxic vapors present, potential danger to clean-up crew. Contaminated soil will be excavated and shipped by NAS personnel to Class I HW disposal site in Portstown, CA when conditions allow."

15. AMOUNT OF SUBSTANCE RECOVERED [VOLUME/WEIGHT] (Pure product):

16. PARTIES PERFORMING [CONTAINMENT/CLEAN-UP] ACTIVITIES:

a. Identify lead organization in charge (e.g., Navy command, USCG, EPA).

b. Identify all other parties involved: Commercial firms, supporting Navy activities, and state or local agencies.

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT:

a. Identify by name and agency any regulatory official attending on-scene or making telephonic inquiry.

b. Note whether officials boarded vessel and include date, time, and spaces inspected.

18. ASSISTANCE REQUIRED/ADDITIONAL COMMENTS.

19. LESSONS LEARNED: How could this release have been avoided?

20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: List name, rank and rate, command, code, DSN, e-mail address, and or commercial telephone numbers.//

C-3 Oil Spill Report

C-3.1. Precedence (for messages only). Provided that prior voice reports have been made both to the USCG NRC and the reporting command's chain of command, use "Routine" precedence for Oil Spill Report Messages. If either voice report has not been made, use "Priority" precedence.

C-3.2. Classification or Special Handling Marks. Oil Spill Report Messages are unclassified and do not warrant special handling marks unless classified or sensitive business information must be incorporated. Avoid inclusion of such information to the maximum extent possible to allow Oil Spill Report Messages to be handled on a solely unclassified basis.

C-3.3. Spill Volume Classification. To better advise the Navy on-scene coordinator and Navy leadership of the magnitude of each oil spill, the subject line of an Oil Spill Report Message should bear a volume estimate of the spill, if known, in the following format:

a. OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] (MINIMIZE CONSIDERED);

b. OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME] (MINIMIZE CONSIDERED); or

c. OIL SPILL REPORT, SHEEN SIGHTING (MINIMIZE CONSIDERED).

C-3.4. Updating Oil Spill Report Messages. Oil Spill Report Messages shall be updated with a follow-up message as soon as the reporting activity becomes aware of new information concerning the origin, quantity, type, operation under way, root cause, or lessons learned of the spill. Similarly, if the final estimate of the amount spilled differs substantially from the

amount initially reported, the reporting activity must send an update message to all action and information addresses on the original spill message.

C-3.5. Action and Information Addressees

FROM: Navy activity/ship responsible for or discovering spill

TO: Navy On-Scene Coordinator
Chain of Command

INFO: Area Environmental Coordinator
Host Activity
OPNAV WASHINGTON DC//N45//
CNIC WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
NAVFAC EXWC PORT HUENEME CA//424//
NOLSC DC FT BELVOIR VA//JJJ//
NAVJAG WASHINGTON DC//11//
NAVSURFWARCENCARDIV PHILADELPHIA PA//923//
[Add NRC for spills into or upon the navigable waters of the United States, its contiguous zone (generally within 12 NM of U.S. shores) and adjacent shorelines.]
COAST GUARD NATIONAL RESPONSE CENTER WASHINGTON DC//JJJ//

C-3.6. Body of Report. Use the following format for the body of all Oil Spill Report Messages. It is important for data management purposes that this format be followed.

UNCLAS//NO5090//
SUBJ: OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] (MINIMIZE CONSIDERED) or OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME] (MINIMIZE CONSIDERED) or OIL SPILL SHEEN SIGHTING, (MINIMIZE CONSIDERED)
MSGID/GENADMIN/ORIGINATOR//
RMKS/

1. LOCAL TIME AND DATE SPILL [OCCURRED/DISCOVERED]

2. [FACILITY/VESSEL] ORIGINATING SPILL:

a. For Navy ships, list ship name and hull number.

b. For Navy shore facilities, list facility name.

c. For non-Navy spills, list name of responsible party, if known.

d. For organizations under contract to Navy, list firm name and contracting Navy activity.

e. If the facility or vessel of spill is unknown at time of this report, list only "Unknown" until such time as definitively established.

3. SPILL LOCATION:

a. For spills at sea, list latitude, longitude, and distance to nearest land.

b. For spills in port, list port name, host naval command (NAVSTA, Shipyard), and specific location (pier or mooring designation).

c. For spills ashore, list city, state, facility name, and specific location (building designation).

4. VOLUME SPILLED IN GALLONS:

a. Estimates must be made by examining loss at source (e.g., checking the sounding tank, calculating flow rate of spill).

b. If amount is unknown at time of this report, list only "Unknown" until such time as definitively established.

c. Estimating volume by visual observation of oil on water can be very unreliable.

d. If volume estimate can only be made by visual observation of oil on water, do not report estimate here.

e. If oil and water mixture, indicate percent oil.

5. TYPE OF OIL SPILLED:

a. List whether marine gas oil, naval distillate (F-76), jet fuel (JP-4 or 5), aviation or automotive gasoline, automotive diesel, heating fuels (e.g., grade 1 or 2, kerosene), residual burner fuel (e.g., grade 4, 5, or 6), lubricating oil; hydraulic oil, oil/oil mixture (including slops and waste oil), or oil/water mixture (including bilge waste).

b. If type unknown at time of this report, list only "Unknown" until such time as definitively established.

6. OPERATION UNDER WAY WHEN SPILL [OCCURRED/DISCOVERED]:

a. If fueling or defueling, list whether underway or in port by pipeline, truck, or barge.

b. Specify whether conducting internal fuel oil transfer operations (including movement from one storage tank to another), pumping bilges, conducting salvage operations, aircraft operations, or "Other" (specify).

c. Include any evolution or operation that had been conducted within 4 hours of spill discovery that may have resulted in oil discharge.

d. If operation unknown or if no evolution can be attributable at time of this report, list only "Operation Not Known" or "To Be Determined" until such time as definitively established.

7. SPILL CAUSE:

a. Classify the spill cause by citing one or more of the following categories and then provide a narrative description of the specific spill cause: Structural; electrical; hose; valve or fitting; tank level indicator; oil and water and separator and oil content monitor; other equipment (specify component that failed); collision, grounding, or sinking; valve misalignment; monitoring error; procedural and communications error; chronic or recurring; or weather related. This information will be used by Commander, Naval Sea Systems Command for causal analysis and spill prevention.

b. If the spill resulted from a mechanical or equipment failure, identify failed equipment or suspected failed equipment by system, nomenclature, allowance part list, service, part number, and or location.

c. If cause unknown or undetermined at time of this report, list only "To Be Determined" or "Under Investigation" until such time as definitively established.

8. SLICK DESCRIPTION AND MOVEMENT:

a. Size: Length and width (yards or NM) and percentage of that area covered.

b. Color: Silver transparent, gray, rainbow, blue, dull brown, dark brown, black, brown-orange mousse.

c. Odor: Noxious, light, undetectable.

d. Slick movement: Set (degrees true toward) and drift (knots).

9. SPILL ENVIRONMENT:

a. Weather: Clear, overcast, partly-cloudy, rain, snow, etc.

b. Prevailing wind at scene: Direction (degrees true from), speed (knots), and fetch (yards or NM).

c. Air and water temperature: Indicate ice cover.

d. Sea state: Beaufort Force number.

e. Tide: High, low, ebb, flood, or slack or current: Set (degrees true toward) and drift (knots).

10. AREAS DAMAGED OR THREATENED:

a. Body of water, area, or resources threatened or affected.

b. Nature and extent of damage to property, wildlife, or other natural resources (if any).

11. TELEPHONIC REPORT TO NATIONAL RESPONSE CENTER [WAS/WAS NOT] MADE:

a. If made, list:

(1) Time and date of telephonic report.

(2) NRC report and case number.

(3) Name of NRC official taking report and quantity of oil reported.

b. If not made, provide reason why: Beyond 12 NM from U.S. shores, no threat to navigable water, etc.

c. Navy command making telephonic report.

12. SAMPLES [WERE/WERE NOT] TAKEN: If taken, identify location(s) from which taken (e.g., tanks, hoses, piping, slip, jetty, etc.) and collecting officer by name, rank, and agency.

13. CONTAINMENT METHOD [PLANNED/USED]:

a. If none, state reason.

b. Otherwise, indicate equipment utilized (e.g., boom, ship's hull, camel, water spray, chemical agent).

14. SPILL REMOVAL METHOD [PLANNED/USED]:

a. If none, state reason.

b. Equipment planned and used (e.g., Rapid Response Skimmer or Dip 3001 skimmer, portable skimmer, absorbent materials (oil absorbent pads, chips, etc.), dispersants, vacuum trucks or pumps, other (specify)).

15. VOLUME OF OIL RECOVERED IN GALLONS (Decanted pure product).

16. PARTIES PERFORMING SPILL REMOVAL:

a. Identify lead organization in charge (e.g., Navy command, USCG, EPA).

b. Identify all other parties involved (e.g., commercial firms, supporting Navy activities, state or local agencies).

17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT:

a. Identify by name and agency any official attending on-scene or making telephonic inquiry.

b. Note whether officials boarded vessel and include date, time, and spaces inspected.

18. ASSISTANCE REQUIRED OR ADDITIONAL COMMENTS

19. LESSONS LEARNED: How could this spill have been avoided?

20. COST OF RECOVERY: Probably not known for initial report. Include in follow up report to the extent known.

21. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION: List name, rank and rate, command, code, e-mail address, and DSN and or commercial telephone numbers.//

Table C-1. Navy Root Cause Analysis Codes

Root Cause Code		International Organization for Standardization 14001:2004(E)
	PLAN (Environmental Policy/Planning)	
	Leadership/Policy/Organizational Management	**4.1 - 4.3**
LPM01	Leadership lacks commitment and or sufficient organizational framework, stature, independence, and authority.	4.1/4.2
LPM02	Formal policies are not appropriate to the nature, scale and environmental impacts of the activities, products, and services.	4.2
LPM03	Environmental requirements and significant aspects are not adequately considered.	4.3.1
LPM04	Procedure is not in place for updating applicable legal requirements.	4.3.2
	DO (Implementation)	
	Resources/Roles/Responsibility and Authority	**4.4.1**
RRA01	Programmatic roles, responsibilities, and authorities are not clearly defined, assigned, documented, and or communicated.	4.4.1
RRA02	Specific management representatives (e.g., line management supervisors, practice owners) do not show commitment and or responsibility for the performance of the environmental management system (EMS).	4.4.1
RRA03	Funds for program-related activities are not sufficient.	4.4.1
RRA04	Staffing levels are not sufficient to	4.4.1

Root Cause Code		International Organization for Standardization 14001:2004(E)
	manage all program-related activities or requirements.	
RRA05	Resources for controlling or improving daily operations including the procurement of appropriate materials or equipment, technology, or services are absent or inadequate.	4.4.1
RRA06	Lack of proper or adequate materials, equipment, and or contract deliverables.	4.4.1
RRA07	Lack of adequate maintenance caused failure or discrepancy.	4.4.1
RRA08	Inadequate design of facility or selection of material or equipment caused failure or discrepancy.	4.4.1
	Competence/Training and Awareness	**4.4.2**
CTA01	No training is conducted.	4.4.2
CTA02	Training is inadequate or ineffective.	4.4.2
CTA03	Personnel do not perform duties as trained.	
	Communication	**4.4.3**
COM01	Internal communication is missing or ineffective.	4.4.3
COM02	External communication is missing or ineffective.	4.4.3
	Documentation/Control of Documents	**4.4.4/4.4.5**
DOC01	Necessary details within documents and records are absent or are inadequate.	4.4.4
DOC02	Procedure(s) to approve, review and update, and retain relevant versions of information is not established or is not adequately implemented.	4.4.5
	Operational Control/Emergency Preparedness and Response	**4.4.6/4.4.7**
OCP01	Documented plans or procedures are inadequate.	4.4.6
OCP02	Documented plans or procedures not properly implemented to control activities.	4.4.6
OCP03	Appropriate contingency planning for	4.4.7

Root Cause Code		International Organization for Standardization 14001:2004(E)
	emergency preparedness and response is missing or ineffective.	
	CHECK (Checking and Corrective Action)	
	Monitoring and Measurement/Evaluation of Compliance	**4.5.1/4.5.2**
MMC01	Calibrated and verified monitoring or measurement equipment is not used or maintained.	4.5.1
MMC02	Internal compliance evaluation is not effective.	4.5.2
	Nonconformity, Corrective Action and Preventive Action/Control of Records/Internal Audit	**4.5.3/4.5.4/4.5.5**
NCA01	The corrective action and preventive action process is not effective.	4.5.3
NCA02	Control and tracking procedure(s) for documents and records is absent or is inadequate.	4.5.4
NCA03	Internal audit program is not implemented or is ineffective.	4.5.5
	IMPROVE (Management Review)	
	Management Review	**4.6**
MRV01	Documented procedure describing the management review process is inadequate.	4.6
MRV02	Roles, responsibilities and authorities are not clearly defined, documented, and or communicated.	4.6
MRV03	Management review process or procedure is **not** implemented effectively.	4.6
MRV04	Management review process is **insufficient to** create change, provide leadership, or effectively improve the EMS.	4.6

TEMPLATE FOR OIL SPILL MESSAGE

FM Navy activity/ship responsible for or discovering spill
TO COMNAVREG MIDLANT NORFOLK VA//N34/N45//
INFO:
NAVFAC MIDLANT NORFOLK VA
NAVSTA NORFOLK VA
OPNAV WASHINGTON DC//N45//
CNIC WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
NAVFAC EXWC PORT HUENEME CA//424//
NOLSC DC FT BELVOIR VA//JJJ//
NAVJAG WASHINGTON DC//11//
NAVSURFWARCENCARDIV PHILADELPHIA PA//923//
(Add NATIONAL RESPONSE CENTER (NRC) for releases into or upon the navigable waters of the US)
COGARD NATIONAL RESPONSE CENTER WASHINGTON DC//JJJ//
COGARD MSO HAMPTON ROADS//JJJ//
NAVFAC LANT//EV//
YOUR PARENT COMMANDS AS APPROPRIATE
UNCLAS//NO5090//
MSGID/GENADMIN/ORIGINATOR//
SUBJ/OIL SPILL REPORT, X GALLONS, (ACTIVITY NAME)//
REF/A/DOC/OPNAVINST 5090.1D//
REF/B/DOC/OPNAV M-5090.1//
REF/C/DOC/COMNAVREGMIDLANT HRINST 5400.1A//
NARR/REF A IS THE 10JAN14 CHIEF OF NAVAL OPERATIONS ENVIRONMENTAL READINESS PROGRAM INSTRUCTION. REF B IS THE NAVY ENVIRONMENTAL READINESS PROGRAM MANUAL OPNAV M-5090.1 FROM 10JAN14. REF C IS THE COMMANDER NAVY REGION MIDATLANTIC HAMPTON ROADS SOPA/ADMIN INSTRUCTION//
RMKS/1. LOCAL TIME AND DATE SPILL (OCCURRED/DISCOVERED):
2. (FACILITY/VESSEL) ORIGINATING SPILL: YOUR COMMAND UNLESS YOU ARE REPORTING AS SOPA AND SPILL ORIGIN IS UNKNOWN
3. SPILL LOCATION: NAVSTA NORFOLK, LOCATION/BUILDING NUMBER
4. VOLUME SPILLED IN GALLONS: XXX GALLONS
5. TYPE OF OIL SPILLED: DIESEL FUEL/ASPHAULT/JP-5/ETC
6. OPERATION UNDERWAY WHEN SPILL OCCURRED/DISCOVERED:
7. SPILL CAUSE:
8. SLICK DESCRIPTION AND MOVEMENT:
9. SPILL ENVIRONMENT: LAND/SOIL/GRASSY AREA/CONCRETE/WATER/PIER
10. AREAS DAMAGED OR THREATENED: SURROUNDING WATER NEAR THE PIER
11. TELEPHONIC REPORT TO NATIONAL RESPONSE CENTER WAS/WAS NOT MADE: BASE ECC AND NRC (REPORT #XXXXXXX IF HAVE IT)
12. SAMPLES WERE/WERE NOT TAKEN:
13. CONTAINMENT METHOD (PLANNED/USED):
14. SPILL REMOVAL METHOD (PLANNED/USED):
15. VOLUME OF OIL RECOVERED IN GALLONS:
16. PARTIES PERFORMING SPILL REMOVAL: USUALLY WILL BE NAVFAC MIDLANT OIL RECOVERY
17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: MAY BE COAST GUARD BUT USUALLY WILL ONLY BE NAVFAC MIDLANT ENVIRONMENTAL ON SCENE
18. ASSISTANCE REQUIRED OR ADDITIONAL COMMENTS:
19. LESSONS LEARNED:
20. COST OF RECOVERY: CAN BE GOTTEN FROM OIL RECOVERY IF THEY PERFORMED CLEAN-UP
21. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION:

TEMPLATE FOR HAZARDOUS SUBSTANCE SPILL MESSAGE

FM NAVY ACTIVITY/SHIP RESPONSIBLE FOR, OR DISCOVERER OF RELEASE
TO COMNAVREG MIDLANT NORFOLK VA//N34/N45//
INFO:
NAVFAC MIDLANT NORFOLK VA
INSTALLATION/HOST ACTIVITY, (IE. NAVSTA NORFOLK VA)
OPNAV WASHINGTON DC//N45//
CNIC WASHINGTON DC//N45//
CHINFO WASHINGTON DC//JJJ//
COMNAVSEASYSCOM WASHINGTON DC//00C//
NAVFAC EXWC PORT HUENEME CA//424//
NOLSC DC FT BELVOIR VA//JJJ//
NAVJAG WASHINGTON DC//11//
NAVSURFWARCENCARDIV PHILADELPHIA PA//923//
(Add NATIONAL RESPONSE CENTER (NRC) for releases into or upon the navigable waters of the US)
COGARD NATIONAL RESPONSE CENTER WASHINGTON DC//JJJ//
COGARD MSO HAMPTON ROADS//JJJ//
NAVFAC LANT//EV//
YOUR PARENT COMMANDS AS APPROPRIATE
UNCLAS//NO5090//
MSGID/GENADMIN/ORIGINATOR//
SUBJ/OIL SPILL REPORT, X GALLONS, (ACTIVITY NAME)//
REF/A/DOC/OPNAVINST 5090.1D//
REF/B/DOC/OPNAV M-5090.1//
REF/C/DOC/COMNAVREGMIDLANT HRINST 5400.1A//
NARR/REF A IS THE 10JAN14 CHIEF OF NAVAL OPERATIONS ENVIRONMENTAL READINESS PROGRAM INSTRUCTION. REF B IS THE NAVY ENVIRONMENTAL READINESS PROGRAM MANUAL OPNAV M-5090.1 FROM 10JAN14. REF C IS THE COMMANDER NAVY REGION MIDATLANTIC HAMPTON ROADS SOPA/ADMIN INSTRUCTION//
RMKS/
1. LOCAL TIME AND DATE SPILL (OCCURRED/DISCOVERED):
2. (FACILITY/VESSEL) ORIGINATING SPILL: YOUR COMMAND UNLESS YOU ARE REPORTING AS SOPA AND SPILL ORIGIN IS UNKNOWN
3. SPILL LOCATION: INSTALLATION, LOCATION/BUILDING NUMBER OR LAT LONG
4. VOLUME SPILLED IN GALLONS: XXX GALLONS
5. HAZARDOUS SUBSTANCE RELEASED: PB-680 TYPE 1/MEKP/ ETC
6. OPERATION UNDERWAY WHEN SPILL OCCURRED/DISCOVERED:
7. SPILL CAUSE:
8. SLICK DESCRIPTION AND MOVEMENT:
9. SPILL ENVIRONMENT: LAND/SOIL/GRASSY AREA/CONCRETE/WATER/PIER
10. AREAS DAMAGED OR THREATENED: SURROUNDING WATER NEAR THE PIER
11. TELEPHONIC REPORT TO NATIONAL RESPONSE CENTER WAS/WAS NOT MADE: BASE ECC AND NRC (REPORT #XXXXXXX IF HAVE IT)
12. SAMPLES WERE/WERE NOT TAKEN:
13. CONTAINMENT METHOD (PLANNED/USED):
14. SPILL REMOVAL METHOD (PLANNED/USED):
15. VOLUME OF SUBSTANCE RECOVERED IN GALLONS:
16. PARTIES PERFORMING SPILL REMOVAL: USUALLY WILL BE NAVFAC ENVIRONMENTAL SERVICES
17. FEDERAL, STATE, OR LOCAL REGULATORY ACTIVITY DURING THIS INCIDENT: MAY BE COAST GUARD BUT USUALLY WILL ONLY BE NAVFAC MIDLANT ENVIRONMENTAL ON SCENE
18. ASSISTANCE REQUIRED OR ADDITIONAL COMMENTS:
19. LESSONS LEARNED:
20. ACTIVITY CONTACT FOR ADDITIONAL INFORMATION:

Appendix H – Construction Inspection Procedures and Annual Report

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, Va. 23511

MS4 PROGRAM ANNUAL REPORT

GENERAL INFORMATION

Permit Number:	**VAR040114**	Report Date:	**7/21/2016**
Reporting Period:	**7/1/2015** to **6/30/2016**	Project Size:	**All Projects**

TOTAL NUMBER OF REGULATED LAND DISTURBING ACTIVITIES

Installation	Number of Land Disturbing Activities
Joint Expeditionary Base Fort Story	1
Joint Expeditionary Base Little Creek	8
Naval Air Station Oceana	4
Naval Air Station Oceana Dam Neck Annex	6
Naval Station Norfolk	17
Naval Support Activity Hampton Roads	2
Naval Support Activity Hampton Roads Portsmouth Annex	0
Scott Center Annex	0
Total	**38**

TOTAL NUMBER OF ACRES DISTURBED

Installation	Number of Acres Disturbed
Joint Expeditionary Base Fort Story	4.01
Joint Expeditionary Base Little Creek	12.38
Naval Air Station Oceana	154.59
Naval Air Station Oceana Dam Neck Annex	37.87
Naval Station Norfolk	50.92
Naval Support Activity Hampton Roads	21.97
Naval Support Activity Hampton Roads Portsmouth Annex	0
Scott Center Annex	0
Total	**281.74**

TOTAL NUMBER OF INSPECTIONS CONDUCTED

Installation	Initial Inspections	Bi-Weekly Inspections	48-Hour Producing Storm Events	Project Completion	Total per Installation
Joint Expeditionary Base Fort Story	1	16	27	0	44
Joint Expeditionary Base Little Creek	1	67	87	6	161
Naval Air Station Oceana	1	59	65	3	128
Naval Air Station Oceana Dam Neck Annex	1	121	145	2	269
Naval Station Norfolk	10	253	349	5	617
Naval Support Activity Hampton Roads	0	33	47	1	81
Naval Support Activity Hampton Roads Portsmouth Annex	0	0	0	0	0
Scott Center Annex	0	0	0	0	0
Total	14	549	720	17	1300

TOTAL NUMBER OF DEFICIENCIES PER INSTALLATION

Installation	Initial Deficiencies	Repeat Deficiencies	Immediate Threat Deficiencies
Joint Expeditionary Base Fort Story	16	6	0
Joint Expeditionary Base Little Creek	39	12	0
Naval Air Station Oceana	32	68	1
Naval Air Station Oceana Dam Neck Annex	111	131	0
Naval Station Norfolk	110	205	0
Naval Support Activity Hampton Roads	8	8	0
Naval Support Activity Hampton Roads Portsmouth Annex	0	0	0
Scott Center Annex	0	0	0
Total	316	430	1

MS4 Construction Site Inspection Procedures and Tracking Mechanism User's Manual

Hampton Roads Installations

Task Orders WE09 and WE74

September 2015

(Version 5)

Prepared for

Department of Navy
Naval Facilities Engineering Command
Mid-Atlantic

Under the

Navy Multimedia Contract
Contract N62470-10-D-3009

Prepared by

ch2m

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PART II – TRACKING MECHANISM USER'S MANUAL

Acronyms and Abbreviations

CGP	Construction General Permit
CI	Capital Improvement
CM	Construction Manager
CS/CD	Construction Supervisor/Construction Director
DFSCCI	Defense Fuel Support Center: Craney Island
DFSCYF	Defense Fuel Support Center: Yorktown
E&S Plan	Erosion and Sediment Control Plan
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FEAD	Facilities, Engineering, and Acquisitions Department
IDA	Intensely Developed Acres
JEB	Joint Expeditionary Base
JEBLC	Joint Expeditionary Base West: Little Creek
JEBFS	Joint Expeditionary Base East: Fort Story
LDA	land disturbing activities
MS4	Municipal Separate Storm Sewer System
MCM	Minimum Control Measure
N/A	Not Applicable
NALF	Naval Auxiliary Landing Field Fentress
NASDN	Naval Air Station Oceana Dam Neck Annex
NASOC	Naval Air Station Oceana
NNSYSA	Norfolk Naval Shipyard: Southgate Annex
NNSYSH	Norfolk Naval Shipyard: St Helena
NPDES	National Pollutant Discharge Elimination System
NSAHR	Naval Support Activity Hampton Roads
NSANW	Naval Support Activity Hampton Roads: Northwest Annex
NSAPX	Support Activity Hampton Roads: Portsmouth Annex
NSN	Naval Station Norfolk
NSNSJ	Naval Station Norfolk: St Juliens Creek Annex
NWSCX	Naval Weapons Station Yorktown: Cheatham Annex
NWSYT	Naval Weapons Station Yorktown
RMA	Resource Management Area
RPA	Resource Protection Area
SCA	Scott Center Annex
TBD	To be determined
VDEQ	Virginia Department of Environmental Quality
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program

SECTION 1

Purpose and Background

1.1 Purpose

The purpose of the Municipal Separate Storm Sewer System (MS4) Construction Site Inspection Procedures document is to establish written inspection procedures for regulated land disturbing activities (LDAs) at naval installations as required by the General Permit for Discharges of Stormwater from Small MS4s, Permit VAR040114. This document also describes the components of the Navy construction site inspection program in accordance with the requirements of Small MS4 General Permit Section II B 4 and the Department of the Navy Environmental Readiness Program (OPNAV M-5090.1). The written procedures identify the criteria utilized by the MS4 program to ensure construction site operators comply with the Virginia Erosion and Sediment Control Regulations and the Virginia Stormwater Management Program (VSMP) Permit regulations.

1.2 Background

In December 1999, the National Pollutant Discharge Elimination System (NPDES) Stormwater Permit program (64 Fed. Reg. 68722) was expanded to include provisions for stormwater discharges from: 1) "small" MS4s serving populations of less than 100,000 people in an "urbanized area", and 2) construction activities disturbing between one and five acres of land. The regulations allowed the Environmental Protection Agency (EPA) to designate States as Stormwater Permitting Authorities, allowing each authorized State to administer and enforce stormwater requirements consistent with the NPDES program. As a delegated State, the Commonwealth of Virginia was required to put into practice an MS4 Phase II General Permit by December 9, 2002. The current MS4 Permit VAR04 became effective on July 1, 2013 and is valid for a 5 year permit cycle, expiring on June 30, 2018. It is included in Attachment 1.

There are several naval installations in the Commonwealth of Virginia that meet the criteria for small MS4 designation. The naval installations in the Hampton Roads area that are currently covered under the Navy's consolidated MS4 Permit VAR040114 include:

1. Naval Station Norfolk
2. Naval Support Activity Hampton Roads (excluding NSA Northwest)
3. Joint Expeditionary Base West: Little Creek
4. Joint Expeditionary Base East: Fort Story
5. Naval Air Station Oceana
6. Naval Air Station Oceana: Dam Neck Annex
7. Naval Support Activity Hampton Roads: Portsmouth Annex
8. Scott Center Annex

The Navy developed a Regional Phase II Stormwater Program Plan for the Virginia General Permit for Small MS4s, which describes the actions the Navy will take to implement the Minimum Control Measures (MCM) as required by the permit. The MCMs include the development of written inspection procedures as well as the establishment and implementation of an inspection program for regulated land disturbing activities. The most recent Stormwater Program Plan addressing the MCMs established under the MS4 Permit can be found in the NAVFAC Environmental Compliance website in the link below:

http://www.navfac.navy.mil/navfac_worldwide/atlantic/fecs/mid-atlantic/about_us/environmental_norfolk/environmental_compliance.html

In addition, to promote good environmental stewardship, and as instructed on the OPNAV M-5090.1, construction site inspections shall be performed in Hampton Roads installations not covered under the MS4 Permit. These inspections will follow the same procedures established in the MS4 Permit Construction Site

Inspection Program but will be performed at a lesser frequency than those installations covered under the MS4 Permit. The Hampton Roads Installations not covered under the MS4 Permit include:

1. Defense Fuel Support Center: Craney Island
2. Naval Weapons Station Yorktown
3. Naval Weapons Station Yorktown: Cheatham Annex
4. Defense Fuel Support Center: Yorktown
5. Naval Auxiliary Landing Field Fentress
6. Naval Station Norfolk: Saint Juliens Creek Annex
7. Norfolk Naval Shipyard: St. Helena
8. Norfolk Naval Shipyard: Southgate Annex
9. Naval Support Activity Hampton Roads: Northwest Annex

SECTION 2

MS4 Permit Construction Site Inspection Program Components

2.1 Background

The MS4 Permit Section II B 4 construction site stormwater runoff control establishes the components of an inspection program. The components include:

- Oversight Requirements
- Approved Erosion and Sediment Control Plan
- Inspection Schedule
- Certification Requirements
- Procedures
- Reporting Requirements

This section will summarize these components.

2.2 Oversight Requirements

The MS4 Permit applicable oversight requirements state: *"The operator shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from the following land-disturbing activities: (1) Land-disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance of 10,000 square feet or greater; (2) Land-disturbing activities in jurisdictions in Tidewater Virginia, as defined in § 62.1-44.15:68 of the Code of Virginia, that disturb 2,500 square feet or greater and are located in areas designated as Resource Protection Areas (RPA), Resource Management Areas (RMA) or Intensely Developed Acres (IDA), pursuant to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act; (3) Land-disturbing activities disturbing less than the minimum land disturbance identified in subdivision (1) or (2) above for which a local ordinance requires that an erosion and sediment control plan be developed; and (4) Land-disturbing activities on individual residential lots or sections of residential developments being developed by different property owners and where the total land disturbance of the residential development is 10,000 square feet or greater. The operator may utilize an agreement in lieu of a plan as provided in § 62.1-44.15:55 of the Code of Virginia for this category of land disturbances."*

The VSMP Regulation (9VAC25-870-10) defines a land disturbing activity as a "manmade change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation, except that the term shall not include those exemptions specified in § 62.1-44.15:34 of the Code of Virginia."

LDAs will be inspected at each of the eight Navy installations covered under the US Navy Consolidated MS4 Permit number VAR040114 in accordance with the minimum standards identified in 9VAC25-840-40. Certified Inspectors may be Navy personnel or contractors. In addition, the Inspector will inspect the implementation of appropriate controls to prevent non-stormwater discharges, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during LDAs in accordance with the MS4 Permit. Attachment 2 includes the minimum standards as per 9VAC25-840-40 of the Erosion and Sediment Control Regulations.

The Inspector will inspect projects with LDAs greater than 10,000 square feet. Projects disturbing land equal or greater than one acre must have coverage under the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities, also referred to as the Virginia Construction General Permit (CGP) Number VAR10 included as Attachment 3. The CGP VAR10

authorizes discharges under the VSMP and the Virginia Stormwater Management Act. The current CGP became effective on July 1, 2014 and is valid for a 5 year permit cycle, expiring on June 30, 2019.

2.3 Approved Erosion and Sediment Control Plan

The MS4 Permit requires the approval of an Erosion and Sediment Control Plan (E&S Plan) prior to commencement of LDA's. As stated in the permit, "*The plan shall be: (1) Compliant with the minimum standards identified in 9VAC25-840-40 of the Erosion and Sediment Control Regulations; or (2) Compliant with department-approved annual standards and specifications. Where applicable, the plan shall be consistent with any additional or more stringent, or both, erosion and sediment control requirements established by state regulation or local ordinance.*"

The E&S Plan is a document that describes the potential for erosion and sediment on a construction project. It describes and illustrates the measures to be taken to control the erosion and transport of sediment. The E&S Plan is a stand-alone document to specifically address the requirements of E&S control measure installation, maintenance, and removal. The Navy is responsible for developing and submitting the E&S Plan for each project with LDA. This responsibility may be delegated to a contractor, but ultimately, the Navy is responsible to ensure the E&S Plan is developed, submitted and approved.

The Virginia Department of Environmental Quality (VDEQ) is the E&S Plan approving authority. VDEQ is required to approve an E&S Plan within 60 days of receipt. If the E&S Plan is inadequate, written notice of disapproval must be communicated by VDEQ to the applicant within 45 days. The written notice shall include the reasons for disapproval and the required modifications. If VDEQ does not take action within 60 days of the E&S Plan receipt, then plan is deemed to be approved.

The Inspector is not responsible for reviewing the E&S Plan but must verify there is an approved E&S Plan at the construction site. The Inspector will use the E&S Plan as a guide to check if the contractor is complying with the E&S Plan and the minimum standards.

2.4 Inspection Schedule

The MS4 Permit Section II 4 B (c) (2) requires the following inspection schedule for land disturbing activities:

- Upon initial installation of erosion and sediment controls
- At least once during every two-week period
- Within 48-hours of any run-off producing storm event
- Upon completion of the project and prior to the release of any applicable performance bonds.

These inspections are described as follows:

- An initial inspection is the first inspection conducted at the project site after the installation of perimeter controls.
- The biweekly inspections are the regular inspections conducted every two weeks.
- The inspections within 48-hours of a runoff producing rain event inspection are the inspections conducted after a rainfall event defined by the Stormwater Management Act (9VAC25-880-1) as producing 0.25 inches of rain or greater over 24 hours. Inspections need to be performed after each qualifying storm event, even if there are consecutive storms during the same week.

  At the end of the qualifying rain event where 0.25 inches per 24 hours is reached, an inspection should be conducted within 48 hours (2 business days). For example, if it began raining Monday afternoon/evening, and the qualifying 0.25 inch or greater of precipitation is achieved, then an inspection would need to be conducted Tuesday and Wednesday (weather permitting). Any rain fall/events that happen on Tuesday or Wednesday would not count as "qualifying rain events" as a 48-hour runoff producing storm event inspection is already scheduled to occur sometime during those two days. If another qualifying storm event is achieved on Thursday, new rain event inspections would need

to be conducted on Friday and/or Monday and the clock would restart again on Tuesday for the next rain event.

- The project completion inspection is the inspection after final stabilization is complete and prior to release of any applicable performance bonds. The Stormwater Management Act (9VAC25-880-1) defines final stabilization when one of the following conditions are met:

"1. All soil disturbing activities at the site have been completed and a permanent vegetative cover has been established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform (e.g., evenly distributed), mature enough to survive, and will inhibit erosion.

2. For individual lots in residential construction, final stabilization can occur by either:

a. The homebuilder completing final stabilization as specified in subdivision 1 of this definition; or

b. The homebuilder establishing temporary soil stabilization, including perimeter controls for an individual lot prior to occupation of the home by the homeowner, and informing the homeowner of the need for, and benefits of, final stabilization.

3. For construction projects on land used for agricultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface waters, and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization criteria specified in subdivision 1 or 2 of this definition."

Section 3.3.4 describe the procedures for developing and updating the Inspection Schedule.

2.5 Certification Requirements

Section II B 4 (c) (3) establishes that the inspections "*shall be conducted by personnel who hold a certificate of competence in accordance with 9VAC25-850-40."* A certificate of competence is issued to individuals who attend the required VDEQ training for Erosion and Sediment Control and successfully passes the examination for Erosion and Sediment Control Inspector.

To become a certified ESC Inspector, the individual must attend a two-day Basic Class training, and a one-day Inspector training course. Once the individual completes both courses, a provisional certification is awarded. The individual will have a period of 12 months to complete the Inspector training after the Basic Course has been taken, and an additional 12 months from completion of the training to take an exam to obtain the certificate of competence before the provisional certificate expires. The certificate of competence is valid for three years. The Inspector will have to recertify prior to the certificate of competence expiration date. To recertify, the individual may re-take the exam, attend VDEQ training courses or complete the required amount of contact hours.

2.6 Inspection Procedures

The MS4 Program inspection procedure requirements are described in Section II B 4 (e) (4) (5) (6). The permit states that the MS4 Program Plan shall include: "*(4) Written inspection procedures and all associated documents utilized during inspection including the inspection schedule; (5) Written procedures for compliance and enforcement, including a progressive compliance and enforcement strategy, where appropriate; and (6) The roles and responsibilities of each of the operator's departments, divisions, or subdivisions in implementing the minimum control measure in Section II related to construction site stormwater runoff control. If the operator utilizes another entity to implement portions of the MS4 Program Plan, a copy of the written agreement must be retained in the MS4 Program Plan. The description of each party's roles and responsibilities, including any written agreements with third parties, shall be updated as necessary."*

Sections 3 and 4 of this report describe the inspection procedures.

This document provides the written inspection procedures, describes the inspection schedule, and includes the inspection program roles and responsibilities in Section 3. The written procedures for compliance and enforcement strategy are described in the Regional Phase II Stormwater Program Plan.

2.7 Reporting

The MS4 Permit Section II B 4 (f) established the reporting requirements. It states that the "operator shall track regulated land-disturbing activities and submit the following information as part of the annual reports.

- Total number of regulated activities
- Total number of acres disturbed
- Total number of inspections conducted
- A summary of the enforcement actions taken, including total number and type of enforcement actions taken during the reporting period."

Inspection reports serve as a notice of compliance or non-compliance. It serves as a record-keeping tool to document if a project complies with the Minimum Standards, the standards and specifications of the Erosion and Sediment Control (ESC) Handbook, and if the project is being constructed in accordance with the E&S approved Plan. It also records potential deficiencies, and corrective actions. An inspection report shall always be complete even if deficiencies are not found. Attachment 4 includes the Site Inspection Report template. The information collected during the site inspections will be summarized on a status report. A Status Report template is included as Attachment 5. Section 4 describe the Status Reporting and Data Management in more detail. The required information will be obtained for each LDA and loaded in a database. The central database will be used to generate the Status Report.

VDEQ provided approval to NAVFAC MIDLANT to use a short version of the Site Inspection Report form during 48-hour runoff producing storm event inspections. The discussions were held after conducting the initial storm event inspections where Inspectors received feedback from Contractors that there was not enough time between a biweekly inspection and a 48-hour runoff producing storm event inspection to address the deficiencies before the next inspection. Therefore, during the 48-hour runoff producing storm event inspection, the Inspector will not inspect any documentation on site, and will not verify if the prior recommended corrective actions have been addressed. The intent of the inspection is to verify if there are areas where sediment or pollutants (such as fuels and oils, waste, debris, process wastewater, etc.) are leaving the project site. Attachment 6 includes the 48 Runoff Producing Storm Event Inspection Form.

2.8 Inspections at Installations Not Covered under the MS4 Permit

The Department of the Navy Environmental Readiness Program Manual (OPNAV M-5090.1) contains the policy guidance for the environmental readiness program (5090.1D, *Environmental Readiness Program).*

The OPNAV 5090, Section 20-3.2 (2) (a) details the compliance requirements for the Environmental Readiness Program including, surface water discharges. It states that "*Stormwater discharges must meet all applicable federal, state, and local permit requirements. Stormwater discharges are a major contributor to surface water quality impairment. The NPDES Stormwater Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. These types of stormwater discharges are either regulated under Phase I or Phase II of the CWA Stormwater Program. Phase I regulations apply to MS4s serving a population of 100,000 or more, as well as stormwater discharges associated with regulated industrial activities as defined in the stormwater regulations, including construction activities disturbing 5 acres of land or more. Phase II regulations apply to MS4s serving a population less than 100,000 that are located in an "urbanized area," and construction activities that disturb greater than or equal to 1 acre of land (including smaller sites in a larger common*

plan of development or sale), or as specified by an individual state. Federally-operated storm sewer systems are defined as MS4s."

The projects with LDAs located at installations not covered under the MS4 Permit will follow the same MS4 Inspection Program as those installations under the MS4 Permit with the exception of the inspection schedule. For installations are not covered under the MS4 Permit, the projects with LDAs to be inspected will be equal to or greater than one acre and require coverage under the Construction General Permit (CGP) VAR10. The CGP requires an Erosion and Sediment Control Plan, Stormwater Management Plan (9VAC25-870-55), and Stormwater Pollution Prevention Plan (9VAC25-870-56). Therefore, during construction, it is required to periodically inspect the LDAs for compliance with the approved erosion and sediment control plan and the approved stormwater management plan.

The inspections will maintain the same components of the MS4 Permit construction site inspection program, such as: oversight requirements, approved erosion and sediment control plan, certification requirements, procedures, and reporting requirements. The inspection frequency for installations not covered under the MS4 Permit is once per calendar month and 48-Hour runoff producing storm event inspections are not required.

SECTION 3

Procedures

3.1 Background

The purpose of establishing written procedures is to ensure compliance with Section II B 4 of the MS4 Permit. The written procedures include all requirements for implementing the inspection program components. This section provides describe the following:

- Roles and responsibilities,
- Pre-inspection procedures,
- Construction site inspection procedures,
- 48-Hour runoff producing storm event procedures, and
- Special conditions

3.2 Roles and Responsibilities

The individuals responsible for the compliance of the MS4 Permit Construction Site Inspections requirements are included in Table 3-1.

TABLE 3-1
MS4 Inspection Individual Roles and Responsibilities

Roles	Responsibilities
Capital Improvement (CI) Designer	Develop and submit the E&S Plan to VDEQ. A Contractor can develop and submit E&S Plans to VDEQ on behalf of the Navy. Maintain communication with VDEQ related to the approval of the E&S Plan. Provide copies of approved E&S Plan to the Construction Manager. Provide E&S Plan approval letter copy to the MS4 Program Manager.
Facilities, Engineering, and Acquisitions Department (FEAD) Construction Manager (CM)	Provide approved E&S Plan copy to the Contractor. Update the Active Project Database on a monthly basis. Review ESC Site Inspection Reports and communicate non-compliance issues to the Contractor. Ensure Contractor complies with corrective action when non-compliance issues are found.
Construction Supervisor/Construction Director (CS/CD)	Supervises the FEAD CMs. Serve as an alternate point of contact for the FEAD CM.
MS4 Program Manager	Evaluate and assess progress towards meeting measurable goals. Maintain a log to track E&S Plan review and approvals. Maintain the Active Project Database. Satisfy MS4 reporting requirements to VDEQ.
Inspector	Conduct Construction Site Inspections. Prepare ESC Site Inspection Reports for each project with LDA. Prepare Status Reports for MS4 Permit reporting compliance. Send construction site inspection reports with deficiencies to corresponding FEAD CS/CD. Note: The Inspector does not have the authority to communicate non-compliance issues to the Contractor. The FEAD CM will communicate to the Contractor the non-compliance issues.

3.3 Pre-Inspection Procedures

This section provides the step by step process related to the activities to be conducted prior to commencement of the construction site inspections. Attachment 7 includes a flowchart of the Pre-Inspection Procedures.

The pre-inspection procedures help to establish documentation and coordination with all parties to manage and conduct the construction site inspections in compliance with the MS4 Permit requirements. This section provides information on the following items.

- Weather Stations
- Active Projects Database
- Inspection Schedule
- Projects Located in Secure Areas
- Erosion and Sediment Control Plan

3.3.1 Weather Stations

Section II 4 C 2 c of the MS4 Permit requires the operator to inspect the land disturbing activities within 48 hours of any runoff producing rain event. The Stormwater Management Act (9VAC25-880-1), defines a measurable storm event as a rainfall event producing 0.25 inches of rain or greater over 24 hours. Currently, NAVFAC has weather stations with rain gauges at some of the naval installations around the Hampton Roads Area. These rain gauges are programmed to send electronic and cellular notifications when total precipitation reaches 0.10-inch.

The existing rain gauge stations cannot be programmed to send notifications when a 0.25-inch storm event is achieved. Therefore, the Inspectors will receive email and text notifications from the existing Navy rain gauge stations when a 0.10-inch storm event is achieved. The 0.10-inch event notification will serve as a notice to the inspectors that an inspection could be required if the rainfall amount reaches 0.25-inches or greater over 24 hours. The project manager, lead inspector, or designee, will monitor the anticipated rainfall amounts using the National Oceanic and Atmospheric Administration (NOAA) national weather service website (http://www.weather.gov/) hourly weather graph. An email will be sent to the inspectors stating that based on the NOAA hourly weather graph, that rainfall amounts are anticipated to reach 0.25-inches or greater over 24 hours. After this email is received, inspectors will examine their schedules and make allowances in anticipation of required inspections. The project manager, lead inspector, or designee, will monitor real-time total rainfall amounts received using the NOAA website (http://water.weather.gov/precip/) precipitation data and the NOAA weather stations listed in Table 3-3. A final email will be sent once the 0.25-inches has been reached (based on the NOAA 3 Day History updated hourly) and inspections are required. Inspectors can also check weather forecasts and rainfall amount themselves for an advanced warning of a 48 hour inspection notification. The “Weatherbug” website (http://weather.weatherbug.com/) and free smartphone application are useful tools to track rain events and rainfall amounts. The “Details” tab on the smartphone application shows the daily precipitation amount and rate/hour in a chosen location.

Table 3-2 includes the list of the Navy weather stations that will be used to send notifications to the Inspectors. Table 3-3 includes a list of the NOAA weather stations the Inspectors will use to identify when a rainfall total of 0.25-inch storm event during 24 hours has been achieved. The 48-hour runoff producing storm event inspections will not be performed at the installations not covered under the MS4 Permit.

TABLE 3-2
Navy Rain Gauge Stations

Installation	Navy Rain Gauge Station Location for 0.10-inch Storm Event Notification
Naval Station Norfolk	Naval Station Norfolk
Naval Support Activity, Hampton Roads (excluding Northwest Annex)	Naval Station Norfolk
Joint Expeditionary Base, Little Creek	Joint Expeditionary Base, Little Creek
Joint Expeditionary Base, Fort Story	Joint Expeditionary Base, Little Creek
Naval Air Station Oceana	Naval Air Station Oceana
Dam Neck Annex	Naval Air Station Oceana
NSA, Portsmouth Annex	St Julien's Creek Annex
Scott Center Annex	St Julien's Creek Annex

TABLE 3-3
NOAA Weather Stations

Installation	Location of NOAA Weather Station
Naval Station Norfolk	Norfolk, Naval Air Station (KNGU)
Naval Support Activity, Hampton Roads (excluding Northwest Annex)	Norfolk, Naval Air Station (KNGU)
Joint Expeditionary Base, Little Creek	Norfolk International Airport (KORF)
Joint Expeditionary Base, Fort Story	Norfolk International Airport (KORF)
Naval Air Station Oceana	Virginia Beach, Oceana, Naval Air Station (KNTU)
Dam Neck Annex	Virginia Beach, Oceana, Naval Air Station (KNTU)
NSA, Portsmouth Annex	Norfolk International Airport (KORF)
Scott Center Annex	Norfolk International Airport (KORF)

Links to weather station websites:
Norfolk, Naval Air Station (KNGU) - http://forecast.weather.gov/MapClick.php?lat=36.93011796300044&lon=-76.29114912099965&site=all&smap=1
Norfolk International Airport (KORF) - http://forecast.weather.gov/MapClick.php?lat=36.89542604200045&lon=-76.20048666799965&site=all&smap=1
Virginia Beach, Oceana, Naval Air Station (KNTU) - http://forecast.weather.gov/MapClick.php?lat=36.80448911400049&lon=-76.01546758999967&site=all&smap=1

3.3.2 Active Projects Database

Each Navy installation FEAD office maintains a list of active construction projects. This list identifies projects that have been awarded, including projects where LDAs have not started. This active projects database is maintained in Microsoft Excel format. The database is updated on a monthly basis. Attachment 8 includes an example of the Active Project Database.

In order to comply with the MS4 Permit requirements, maintaining an up-to-date list is crucial. The procedures to maintain an updated list of all active and future projects with LDAs are as follows:

1. The MS4 Program Manager will request the 1st of each month an updated list of active projects from each installation FEAD Construction Manager.
2. The MS4 Program Manager will compile the information from all installations and update the Active Construction Projects master list. The master list will be provided to the Inspectors by the 15th of every month.

3. The Inspectors will review the updated master list and identify any projects with new land disturbing activities.
4. The first visit to active land disturbing activity projects will be the Initial Inspection visit, even if the project construction has already started.
5. The inspection schedule will be updated if new projects are added and a Project Code will be created by the Inspector.
6. The active project database list will be updated in the tracking mechanism database.
7. When new projects are included, an updated schedule will be distributed to the Inspector, MS4 Program Manager, and the Construction Managers and Supervisors.

The active project database includes projects with active LDAs, projects not started, active projects with no LDAs (interior construction), on hold, and complete.

3.3.3 Inspection Schedule

The Inspector will develop an inspection schedule to comply with the requirements of Section II 4 C 2 of the MS4 Permit. The schedule will include the days of the week when performing initial inspections, bi-weekly inspection, monthly inspections, and project completion inspections. An example of the inspection schedule is included in Attachment 9.

Two separate inspection schedules will be prepared in a monthly basis: a bi-weekly inspection schedule and a monthly inspection schedule. The bi-weekly inspection schedule includes the projects with LDAs located at installations covered under the MS4 Permit and the monthly inspection schedule includes the projects with LDAs at installations not covered under the MS4 Permit.

Each inspection schedule will include the following information:

- Date
- Naval installation where inspections will be conducted each day
- Inspection hours for each day, for example: 0700 – 1400
- Names of the projects to be inspected each day

The inspection schedule will be modified on a monthly basis, as needed, when new projects start LDAs, when projects are completed, and when new projects are added to the active project database where LDAs have not started (site visits). The procedures related to the inspection schedule are as follows:

1. The MS4 Program Manager will provide the Inspector an updated active project database electronically via email by the 15th of every month.
2. The Inspector will update the inspection schedules to include the initial inspection, bi-weekly inspections, monthly inspections, project completion inspections, and where site visits (drive-bys) will be performed to verify if LDAs have started (at installations covered under the MS4 Permit only). The inspection schedule dates may be adjusted based on new projects location, holidays, and adverse weather, among others.
3. The Inspector will provide the updated Inspection Schedule electronically via email to the MS4 Program Manager by the 1st of each month. If schedule has been updated, a revised version will be provided immediately via email.
4. The MS4 Program Manager will send the Inspection Schedule to the FEAD offices.

Projects with active LDAs at installations covered under the MS4 Permit will be visited bi-weekly as per Section II 4 C 2 of the MS4 Permit. Projects that have not started or are active with no LDAs will be visited every 4 weeks to identify if LDAs started. If LDAs have started, these projects will be added to the regular bi-weekly schedule. Projects with active LDAs at installations not covered under the MS4 Permit will be visited

once per calendar month. Site visits will not be performed for projects that have not started LDAs at installations not covered under the MS4 Permit.

3.3.4 Projects in Secure Areas

Some of the Navy installations have secure areas where the Inspector needs to be escorted at all times. The projects located within secure areas are identified in the active project database detailed in Section 3.3.2. The procedures to gain access to conduct inspections are as follows:

1. The Inspectors will request a 12-month clearance to the secure areas. The information will be sent to the MS4 Program Manager. The Inspector shall include the following information: full name, social security number, date of birth, and place of birth.
2. The Inspector can be escorted by the Contractor if clearance has been provided.
3. If the Contractor is unavailable or clearance has not been obtained, then:
    a. The FEAD CM will review the Inspection Schedule to identify the dates where projects within secure areas will be inspected.
    b. The Inspector will email the FEAD CM a week in advance by Thursday that escort is required to the secure area.
    c. The Inspector will coordinate a specific time to be escorted to the project with the corresponding CM. The coordination can be made via email or phone call. The Inspectors shall adhere to the Inspection Schedule to comply with the MS4 Permit requirements. The CM shall schedule a time on the project inspection date.
4. If additional clearance is needed to access secure area, the MS4 Program Manager will coordinate and submit the required information to the installations.

3.3.5 Erosion and Sediment Control Plan Coordination

Land disturbing activities require an Erosion and Sediment Control Plan (E&S Plan) approved by the VDEQ. The E&S Plans are approved by VDEQ and sent to the Capital Improvement (CI) Designer Offices. The MS4 Program Manager receives copies of the approval letters from VDEQ but not a copy of the E&S Plan. This section describes the coordination procedures with the Navy related to the Erosion and Sediment Control plan approval process. An example of a VDEQ E&S Plan Approval letter is included as Attachment 10.

Projects that started LDAs prior to the MS4 Permit effective date may be grandfathered under the previous permit and are not required to have a plan or plans may have been approved by the Navy. The E&S Plan status of each of the projects with LDAs is needed by the Inspector prior to starting construction site inspections to identify if a project is in compliance with the MS4 Permit requirements. The E&S Plan submittal and approval process coordination is as follows:

1. The CI Design Department or Contractor develops and submits the E&S Plan to VDEQ for approval for each of the projects. The CI Designer Department or Contractor is the main point of contact between the Navy and VDEQ related to the E&S Plans.
2. The CI Department receives the approved E&S Plans and the VDEQ E&S Plan Approval Letter from VDEQ.
3. The CI Department provides a copy of the approved E&S Plan to the corresponding FEAD CM.
4. The CI Department provides a copy of the VDEQ E&S Plan Approval Letter to the MS4 Program Manager.
5. The FEAD CM provides a copy of the approved E&S Plan to the Contractor.
6. The MS4 Program Manager will provide a copy of the VDEQ E&S Plan Approval Letter to the Inspector. If the project started LDAs prior to the MS4 Permit effective date, the project may be grandfathered and not require an E&S Plan or the E&S Plan may have been approved by the Navy.

7. The Inspector will update the Inspection Tracking Central database and upload a copy of the Approval Letter to the SharePoint site.
8. Inspections may be started without an approved E&S Plan.
9. In the Active Project Database, the MS4 Program Manager or the CI Designers will indicate the status of the E&S Plan (e.g. approved, submitted, rejected, etc.).

If the project has LDAs equal or greater than one acre, then the VDEQ letter will include the approval for the E&S Control Plan and the Stormwater Management Plan. The Stormwater Pollution Prevention Plan (SWPPP) is not reviewed or approved by VDEQ but can be requested by VDEQ in the event of a regulatory site inspection.

3.4 Construction Site Inspection Procedures

The purpose of construction site inspections is to verify that the project complies with the requirements set forth in the ESC Law, the ESC Regulations, and the VESC Handbook. This section provides the step by step process related to the activities to be conducted during the construction site inspections. The procedures will be implemented to comply with Section II B 4 (c) (2) of the MS4 Permit. The permit requires the following inspection schedule for LDAs:

- Upon initial installation of erosion and sediment controls (Initial Inspection);
- At least once during every 2-week period (Bi-Weekly Inspection)
- Within 48 hours of any run-off producing storm event; and
- Upon completion of the project and prior to the release of any applicable performance bonds (Project Completion Inspection).

The projects with LDAs located at installations not covered under the MS4 Permit will follow the same procedures as those installations under the MS4 Permit with the exception of the inspection schedule. Even though the installations are not covered under the MS4 Permit, the procedures described herein apply since the projects to be inspected are equal or greater than one acre and require coverage under the Construction General Permit (CGP) VAR10.

For all inspections, the Site Inspection Reports will be uploaded on the SharePoint site on a daily basis in a PDF format. The information collected during the daily inspections will be uploaded into the central database in a weekly basis. Status reports will be created from the central database.

3.4.1 Initial, Bi-Weekly, Monthly, and Project Completion Inspection Procedures

The initial, bi-weekly, and project completion inspections will follow the same procedures. These inspections will be performed during normal business days, Monday through Friday. Section 2.4 provides a definition for each of the inspection types. If a 48-hour runoff-producing storm event inspection is conducted and the bi-weekly inspection is scheduled to occur on that day, the 48-hour storm event inspection will also serve as the bi-weekly inspection. A flowchart describing the workflow for these inspections is included as Attachment 11.

The monthly inspections for projects with LDAs at installations not covered under the MS4 Permit will follow the same procedures as the initial, bi-weekly, and project completion inspections with the exception that the inspections will be performed once per calendar month.

The procedures for the initial, bi-weekly, monthly, and project completion inspections are as follows:

1. Inspections will be conducted based on the Inspection Schedule.
2. The Inspector will check-in at the construction trailer when he/she arrives at the construction site. Construction trailers may not be on site for small projects. If there is no construction trailer, the Inspector will find the Contractor Supervisor or Foreman prior to starting the site inspection. For projects located within secure areas, the construction trailer will be outside the secure area and not located at

the project site. For projects with the same Contractor and located at multiple sites, the construction trailer may not be located at the project site to be inspected.

3. The Inspector will discuss the following items with the Contractor Foreman or Supervisor:
   a. Inspector will introduce him/herself and explain their role.
   b. The Inspector will request the approved E&S Plan and during the initial inspection, he/she will request if an electronic PDF copy of the E&S Plan is available. An electronic copy of the E&S Plan will help the Inspectors perform inspections within 48 hours of a runoff producing storm event more efficiently.
   c. At the initial site inspection, notify the Contractor that photographs will be taken on site and will avoid any sensitive areas of the installation. Note that photographs are not permitted inside secure areas. Electronic devices including cellphone devices must be left in the car when accessing secure areas.
   d. The Inspector shall explain to the Contractor that they don't have the authority to provide a report of any observed deficiencies to the Contractor. The project FEAD CM will be responsible for reporting any deficiencies, if found, and their corresponding corrective actions to the Contractor.
4. The Inspector will perform the construction site field inspection.
5. The Inspection will complete the Site Inspection Form for each project, even if no deficiencies are observed and Attachment 12 includes a copy of the form. During inspections, the Inspector will provide the following information.
   a. Verify if the project has an approved E&S Plan. If the project does not have an approved E&S Plan, the Inspector will contact the MS4 Program Manager and the FEAD CM to verify if an E&S Plan has been developed or if the project started prior to the MS4 Permit effective date. If projects started land disturbing activities prior to the new MS4 Permit, the project may be grandfathered under the previous MS4 Permit or the E&S Plan may have been approved by the Navy.
   b. Identify if any previous deficiencies have been corrected. If so, the Inspector will note it in the report. If the deficiencies have not been corrected, the Inspector will mark the deficiency as a repeat deficiency.
   c. Verify the project is being constructed in accordance with the approved E&S Plan.
   d. Verify if the project complies with the minimum E&S standards and specifications.
   e. Verify perimeter controls and adjacent properties.
   f. Verify areas where sediment is likely to leave the site.
   g. Verify any environmental sensitive areas.
   h. Inspect the project outfall.
6. If deficiencies are found:
   a. The Inspector will verify if deficiencies are an immediate threat to the safety of the personnel, and adjacent properties. If deficiencies present are considered an immediate threat, these deficiencies will require immediate corrective actions.
      i. If an immediate threat is identified, then:
         - The Inspector will contact the corresponding project FEAD CM and discuss the deficiency and required immediate corrective action.
         - If the Inspector cannot reach the FEAD CM, the Inspector will contact the FEAD Construction Supervisor.

- After contacting the CM, the Inspector will contact the MS4 Program Manager.
- The Inspector will complete the site inspection report.
- The Inspector will upload an electronic PDF copy of the Site Inspection Report into the SharePoint.
- Daily alerts will be sent via email to the MS4 Program Manager with a summary of the reports that have been uploaded into the SharePoint site. A notification will be created for each of the installations individually and will be sent automatically directly from the SharePoint site via email every night at 11:00 PM EST.
- The MS4 Program Manager, Inspector or designee will send the report with deficiencies to the corresponding FEAD CS/CD. The FEAD office will distribute the report to the corresponding FEAD CM and Contractor.
- The Inspector will continue with the regular bi-weekly or monthly inspection and verify if the corrective actions have been addressed. The Inspector will not be notified of the discussions between the FEAD CM and the Contractor.
- The Inspector will verify if the deficiencies have been corrected during the next scheduled bi-weekly inspection or monthly inspection for a project is located in an installation not covered under the MS4 Permit.
- If a deficiency has not been corrected, it will be marked as a repeat deficiency in the Site Inspection Form and the same process will be followed as described in this section.

ii. If no immediate threat is observed:

- The Inspector will complete the site inspection report.
- The Inspector will upload an electronic copy in PDF of the Site Inspection Report into the SharePoint.
- Daily alerts will be sent via email to the MS4 Program Manager with a summary of the reports that have been uploaded into the SharePoint site. A notification will be created for each of the installations individually and will be sent automatically directly from the SharePoint site via email every night at 11:00 PM EST.
- The Inspector will continue with the regular bi-weekly or monthly inspection. The Inspector will not be notified of the discussions between the FEAD CM and the Contractor.
- The Inspector will verify if the deficiencies have been corrected during the next scheduled bi-weekly inspection or monthly inspection for a project is located in an installation not covered under the MS4 Permit.
- If a deficiency has not been corrected, these will be marked as a repeat deficiency in the Site Inspection Form and the same process will be followed as described in this section.

7. If no deficiencies are observed:

   a. The Inspector will complete the site inspection report.

   b. The Inspector will upload an electronic copy in PDF of the Site Inspection Report into the SharePoint site.

   c. Continue with the regular bi-weekly or monthly inspection.

3.4.2 48-Hour Runoff Producing Storm Event Inspection Procedures

A 48-hour runoff producing rain event is defined as a rainfall event producing 0.25 inches of rain or greater over 24 hours, as described in Section 2.4 of this report. Inspections have to be conducted within 48 hours of the end of the storm event. If the event occurs during the weekend, holidays, or outside of business hours, the Inspections will be conducted the next business day (Monday through Friday, excluding holidays). Attachment 13 includes a flowchart of the 48-Hour Runoff Producing Storm Event Inspection procedures.

During the 48-hour runoff producing storm event inspection, the Inspector will not inspect any documentation on site, and will not verify if the prior recommended corrective actions have been addressed. The intent of the inspection is to verify if there are areas where sediment or pollutants (such as fuels and oils, waste, debris, process wastewater, etc.) are leaving the project site. Full inspections will only be conducted if the project was scheduled to have a biweekly inspection on the day the 48-hour runoff producing storm event inspection is been conducted.

Since inspections have to be conducted within 48 hours, additional Inspectors will be activated to be able to comply with the MS4 Permit requirement. A separate inspection schedule will be developed to allow assignment of projects by Inspector per installation to ensure that all projects are inspected within the required timeframe. An example of this schedule is included as Attachment 14. The 48-hour runoff producing storm event inspection schedule will be updated as new projects are added or projects are completed and eliminated from the Active Project Database.

48-Hour runoff producing storm event inspections will not be performed at installations not covered under the MS4 Permit.

The procedures for the 48-Hour Runoff Producing Storm Event Inspections are as follows:

1. One Inspector from the team will monitor the weather for potential storm events.
2. All backup Inspectors will be notified of a potential 48-Hour runoff producing storm event.
3. Inspectors will receive a notification from the Navy rain gauges electronically via email and a text message when a storm event have reached 0.10 inch of rain. Table 3-2 includes the corresponding Navy rain gauges for each installation.
4. The Inspectors will start monitoring the weather stations referenced under Section 3.3.1 for each installation.
5. Projects will be assigned by installation to each of the Inspectors.
6. When a storm event of 0.25 inches or greater is achieved, Inspectors will start conducting Construction Site Inspections. The 48-hour inspection window starts at the end of the storm event. If weather conditions allow it (no thunderstorms or adverse weather), the Inspectors may choose to start inspections right away.
8. The Inspector will follow the procedures in Section 3.4.1. Attachment 15 includes a copy of the 48-Hour Runoff Producing Storm Event Inspection Field Form.
7. If the Inspector visits the site and find that project LDAs are suspended due to weather conditions, the Inspector will contact the FEAD CM and identify when the LDAs will be resumed. The Inspector will attempt to conduct a second inspection. If the LDAs are still suspended, then the Inspector will conduct the next inspection as per the regular bi-weekly schedule.

3.4.3 Site Visits to Projects with No Land Disturbing Activity

The site visit to projects with no LDAs consist of visiting the projects included in the active project database where the status is identified as not started or active with no LDAs (interior construction). Many times, Contractors have mobilized to the site but are waiting for the VDEQ E& Control Plan approval or the CGP approval before starting LDAs. Therefore, activities may start quickly without notice to the Inspectors. Even

though is not a requirement to visit these sites as per the MS4 permit, it is important to record visits to these locations and the status of the LDAs.

These site visits will be performed every four (4) weeks during normal business days, Monday through Friday. The site visit may consist of a drive-by if no personnel is on site or a conversation with the Contractor if mobilization has occurred. The Site Visit Report template is included as Attachment 16.

The procedures for the Site Visits is as follows:

1. Inspections will be conducted based on the Inspection Schedule (every 4 weeks).
2. The Inspector will check-in at the Construction Trailer when he/she arrives at the construction site. Construction trailers may not be on site for small projects. If there is no Construction Trailer, the Inspector will find the Contractor Supervisor or Foreman. For projects within secure areas, Construction Trailer is located at a different location than the project and outside of the secure area. This may also occur for projects located at different sites but that have the same Contractor.
3. The Inspector will complete the site visit report.
4. The Inspector will upload an electronic copy in PDF of the Site Visit Report into the SharePoint site.
5. Continue with the regular inspections every four weeks until the project start LDAs.

3.4.4 Special Conditions

The special conditions section includes a description of the procedures if there is a snowstorm or freezing conditions.

- If the snow fall doesn't produce any runoff, then no inspections will be conducted.
- If the snow accumulates, the runoff producing event doesn't happen until the snow melts and produces runoff.
- The Construction General Permit (VAR10), Part II F (SWPPP Inspections) establishes a potential inspection frequency reduction if there are frozen ground conditions as follows: "*b. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.*"
- The Inspector will discuss a potential change to the schedule with the MS4 Program Manager and its reasons. The MS4 Program Manager must approved the change to the inspection schedule.

SECTION 4

Reporting and Data Management

4.1 Reporting Requirements

Section II B 4 of the MS4 Permit requires that the operator track regulated land-disturbing activities and submit the following information as part of the annual reports.

- Total number of regulated activities
- Total number of acres disturbed
- Total number of inspections conducted
- A summary of the corrective actions taken, including total number and type of corrective action taken during the reporting period.

The construction site inspection status reports will be used to create the MS4 Program annual report. The status reports will be created and submitted on a monthly basis to the MS4 Program Manager. The report will enable the MS4 Program Manager to assess the status of all projects with LDAs at each of the Navy installations under the MS4 Permit with a summary of the projects where initial deficiencies, repeat deficiencies, and deficiencies that pose an immediate threat were observed. The report includes the MS4 Permit required information by installation with a total for all installations. Table 4-1 includes a description of the fields used in the Status Report. The source of all information is from the site construction inspections. Attachment 5 includes the Erosion and Sediment Control Status Report template and the MS4 Program Annual Report template. Attachment 17 includes the Site Visit Status Report template which summarizes the number of site visits conducted per installation. Attachment 18 includes the Erosion and Sediment Control Status Report Template for installations not covered under the MS4 Permit.

TABLE 4-1
Status Report Fields

Field	Description
Permit Number	US-Navy Consolidated MS4 Permit number VAR040114
Report Date	Date the report is created
Reporting Period	Start and end dates of reporting inspection period
Total Number of Regulated Land Disturbing Activities table	Count of all construction projects with LDAs per installation
Total Number of Acres Disturbed table	The sum of land disturbed area in acres for projects with active LDAs per installation during the reporting period
Total Number of Inspections Conducted table	Count of all the construction site inspections conducted during the reporting period per inspection type and per installation. There are four types of inspections based on the MS4 Inspection Schedule: Initial Inspection, Bi-Weekly Inspection, 48-Hour Runoff Producing Storm Event Inspection, and Project Completion Inspection.
Summary of Deficiencies per Installation table	Includes a summary of the projects per installation were deficiencies where observed. Includes the following: - Count of the total number of initial deficiencies observed - Count of the total number repeat deficiencies observed - Count of the total number of corrective immediate threat actions taken - List of projects and corresponding inspection dates where deficiencies were observed.

4.2 Data Management

The MS4 Construction Site Inspection information will be collected electronically using a series of tracking tools developed in Microsoft Access. These tools will be used for record-keeping and developing the inspection and status reports to comply with the reporting requirements under the MS4 Permit. The tracking mechanism consists of:

- An inspection data collection tracking tool (Field Tool)
- An inspection tracking central database, and
- A SharePoint site for web-based access

A User's Manual has been developed and included as Part II of this Report. The following sections provide a brief summary of the purpose of the record-keeping and tracking mechanisms User's Manual. For more details related to each mechanism and their interface, refer to the User's Manual in Part II of this report.

4.2.1 Inspection Tracking Mechanism

The Inspection Tracking Mechanism consists of a data collection tracking tool and a central database designed as Microsoft Access databases. It will be used in the field to collect the information required for the Site Inspection Form. The field collection tool (Field Tool) is a viewer that contains the forms, queries, and reports. This Field Tool is linked to the central database. The central database stores all the information regarding the inspections performed. The Inspectors also have the capability of producing the Site Inspection Report in PDF format. These reports will be uploaded on a daily basis to the SharePoint site. The Central Database will be updated on a weekly basis.

4.2.2 SharePoint Site

A SharePoint site has been developed inside the CH2M HILL network server to serve as the main record keeping location of all project information, site Inspection reports, and status reports. Inspectors will be able to send automatic notifications to the CMs when deficiencies are observed during Site Inspection Reports. It will also contain an up to date inspection schedule. The SharePoint site will not be transferred to the Navy at the end of the project but information included on the SharePoint site, tracking tool, and database will be provided to the Navy. Navy users will have the capability to access the SharePoint site using an assigned CH2M HILL user name.

Attachment 1
Phase II MS4 General Permit VAR004

Attachment 2
Minimum Standards

Attachment 3
Construction General Permit VAR10

Attachment 4
Erosion and Sediment Control Site Inspection Form

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, Va. 23511

SITE INSPECTION REPORT

SECTION I: PROJECT INFORMATION

Project Name:	Total Disturbed Acreage:	
Project Location:	Installation:	
Inspector:	Date of Inspection:	Time:
Weather Conditions:		
NAVFAC Construction Manager:	Project Operator:	
Inspection Type: ☐ Initial Inspection ☐ Initial/48-hour Runoff Producing Storm Event Inspection ☐ Bi-Weekly Inspection ☐ Bi-Weekly/48-hour Runoff Producing Storm Event Inspection ☐ 48-hour Runoff Producing Storm Event Inspection ☐ Project Completion Inspection	Present at Inspection:	
VSMP VAR10 Construction Inspection Required: ☐ *Complete Section IV*	VSMP Permit Number:	
E&S Control Plan Approval Letter Received:	E&S Control Plan Approval Letter Date:	

SECTION II: STAGE OF CONSTRUCTION

Pre-Construction ☐	Building Construction ☐	Construction of SWM Facilities ☐
Clearing & Grubbing ☐	Finish Grading ☐	Maintenance of SWM Facilities ☐
Rough Grading ☐	Final Stabilization ☐	Other: _____ ☐

SECTION III: EROSION AND SEDIMENT CONTROL

Item	**Virginia E&S Control Law and Regulations**	***Yes***	***No***	***N/A***	***Notes***
1	Does the Project have an E&S control plan onsite?	☐	☐	☐	
2	Has the onsite E&S Control Plan been approved by the VESCP Authority?	☐	☐	☐	
3	Are E&S Control measures installed in accordance with the approved plan?	☐	☐	☐	
4	Is the project in compliance with the 19 minimum standards of the Erosion and Sediment Control Regulations?	☐	☐	☐	
5	Is the project operator conducting routine inspections of the installed E&S control measures?	☐	☐	☐	
6	Does the project have appropriate controls in place to prevent non-stormwater discharges to the MS4, such as: wastewater, concrete washout, fuels and oils, construction waste, and other illicit discharges?	☐	☐	☐	
7	Has sediment or other pollutants been observed leaving the project site?	☐	☐	☐	

SECTION IV: VSMP PERMIT COMPLIANCE (Projects disturbing land equal or greater than 1 acre)

Item	VAR10 Permit Required Items; 9VAC25-880-70	*Yes*	*No*	*N/A*	*Notes*
1	Project has received permit coverage to discharge stormwater under the Virginia Construction Stormwater General Permit?	☐	☐	☐	
2	Is a copy of the Permit coverage letter posted onsite?	☐	☐	☐	
3	Does the Operator have a SWPPP onsite?	☐	☐	☐	
4	Does the SWPPP identify the "Qualified Personnel" conducting inspections for the Operator?	☐	☐	☐	
5	Is the Operator conducting site inspections at the required frequency identified in the General Permit?	☐	☐	☐	
6	Stabilization control measures are being utilized?	☐	☐	☐	
7	Structural control measures designed and installed?	☐	☐	☐	
8	Control measures are maintained?	☐	☐	☐	
9	Litter, debris, and chemicals are controlled from becoming a pollutant source?	☐	☐	☐	

SECTION V: RECOMMENDED CORRECTIVE ACTIONS

RCA	State Regulation (Minimum Standards)/ Construction General Permit	VA ESC Handbook Standards and Specifications	Deficiency		Description and Location of Condition Observed, Recommended Corrective Actions, and Other Comments	Recommended Corrective Action Date
			Initial	Repeat		
			☐	☐		
			☐	☐		
			☐	☐		
			☐	☐		
			☐	☐		

NOTES:

CORRECTIVE ACTIONS IDENTIFIED DURING MOST RECENT INSPECTION

Inspection Date	RCA	State Regulation (Minimum Standards)/ Construction General Permit	VA ESC Handbook Standards and Specifications	Description and Location of Condition Observed, Recommended Corrective Actions, and Other Comments	Status	Description of Addressed Corrective Action

Attachment 5
Erosion and Sediment Control Status Report & MS4 Program Annual Report Templates

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, VA 23511

EROSION AND SEDIMENT CONTROL STATUS REPORT

GENERAL INFORMATION

Permit Number: VAR040114	Report Date:
Reporting Period: to	

TOTAL NUMBER OF REGULATED LAND DISTURBING ACTIVITIES

Installation	**Number of Land Disturbing Activities during reporting period**
Naval Station Norfolk	
Naval Support Activity, Hampton Roads (excluding NSA Northwest)	
Joint Expeditionary Base, Little Creek	
Joint Expeditionary Base, Fort Story	
Naval Air Station Oceana	
Dam Neck Annex	
Naval Support Activity, Hampton Roads, Portsmouth Annex	
Scott Center Annex	
Total	

TOTAL NUMBER OF ACRES DISTURBED

Installation	**Number of Acres Disturbed**
Naval Station Norfolk	
Naval Support Activity, Hampton Roads (excluding NSA Northwest)	
Joint Expeditionary Base, Little Creek	
Joint Expeditionary Base, Fort Story	
Naval Air Station Oceana	
Dam Neck Annex	
Naval Support Activity, Hampton Roads, Portsmouth Annex	
Scott Center Annex	
Total	

TOTAL NUMBER OF INSPECTIONS CONDUCTED

Installation	**Initial Inspections**	**Bi-Weekly Inspections**	**48-Hour Producing Storm Events**	**Project Completion**	**Total per Installation**
Naval Station Norfolk					
Naval Support Activity, Hampton Roads (excluding NSA Northwest)					
Joint Expeditionary Base, Little Creek					
Joint Expeditionary Base, Fort Story					
Naval Air Station Oceana					
Dam Neck Annex					
Naval Support Activity, Hampton Roads, Portsmouth Annex					
Scott Center Annex					
Total					

SUMMARY OF DEFICIENCIES PER INSTALLATION

Installation: **Naval Station Norfolk**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Support Activity Hampton Roads (excluding NSA Northwest)**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Joint Expeditionary Base, Little Creek**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Joint Expeditionary Base, Fort Story**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Air Station Oceana**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Dam Neck Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Support Activity Hampton Roads, Portsmouth Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Scott Center Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, VA 23511

MS4 PROGRAM ANNUAL REPORT

GENERAL INFORMATION

Permit Number: VAR040114	Report Date:
Reporting Period: to	

TOTAL NUMBER OF REGULATED LAND DISTURBING ACTIVITIES

Installation	**Number of Land Disturbing Activities during reporting period**
Naval Station Norfolk	
Naval Support Activity Hampton Roads (excluding NSA Northwest)	
Joint Expeditionary Base Little Creek	
Joint Expeditionary Base Fort Story	
Naval Air Station Oceana	
Naval Air Station Oceana Dam Neck Annex	
Naval Support Activity Hampton Roads- Portsmouth Annex	
Scott Center Annex	
Total	

TOTAL NUMBER OF ACRES DISTURBED

Installation	**Number of Acres Disturbed**
Naval Station Norfolk	
Naval Support Activity Hampton Roads (excluding NSA Northwest)	
Joint Expeditionary Base Little Creek	
Joint Expeditionary Base Fort Story	
Naval Air Station Oceana	
Naval Air Station Oceana Dam Neck Annex	
Naval Support Activity Hampton Roads- Portsmouth Annex	
Scott Center Annex	
Total	

TOTAL NUMBER OF INSPECTIONS CONDUCTED

Installation	Initial Inspections	Bi-Weekly Inspections	48-Hour Producing Storm Events	Project Completion	Total per Installation
Naval Station Norfolk					
Naval Support Activity Hampton Roads (excluding NSA Northwest)					
Joint Expeditionary Base Little Creek					
Joint Expeditionary Base Fort Story					
Naval Air Station Oceana					
Naval Air Station Oceana Dam Neck Annex					
Naval Support Activity Hampton Roads- Portsmouth Annex					
Scott Center Annex					
Total					

TOTAL NUMBER OF DEFICIENCIES PER INSTALLATION

Installation	Initial Deficiencies	Repeat Deficiencies	Immediate Threat Deficiencies
Naval Station Norfolk			
Naval Support Activity Hampton Roads (excluding NSA Northwest)			
Joint Expeditionary Base Little Creek			
Joint Expeditionary Base Fort Story			
Naval Air Station Oceana			
Naval Air Station Oceana Dam Neck Annex			
Naval Support Activity Hampton Roads- Portsmouth Annex			
Scott Center Annex			
Total			

Attachment 6
48-Hour Runoff Producing Storm Event Inspection Form

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, Va. 23511

48 HOUR RUNOFF PRODUCING STORM EVENT INSPECTION FORM

SECTION I: PROJECT INFORMATION

Project Name:	Total Disturbed Acreage:	
Project Location:	Installation:	
Inspector:	Inspection Date:	Inspection Time:
Weather Conditions:	Precipitation (inches):	
NAVFAC Construction Manager:	Project Operator:	
Inspection Type: ☐ 48-hour Runoff Producing Storm Event Inspection	Present at Inspection:	

SECTION II: STAGE OF CONSTRUCTION

Pre-Construction ☐	Building Construction ☐	Construction of SWM Facilities ☐
Clearing & Grubbing ☐	Finish Grading ☐	Maintenance of SWM Facilities ☐
Rough Grading ☐	Final Stabilization ☐	Other: _____ ☐
Mobilization ☐	Interior Construction ☐	

SECTION III: SITE INSPECTION

Item	**Virginia E&S Control Law and Regulations**	***Yes***	***No***	***N/A***	***Notes***
1	Does the project have appropriate controls in place to prevent non-stormwater discharges to the MS4, such as: wastewater, concrete washout, fuels and oils, construction waste, and other illicit discharges?	☐	☐	☐	
2	Has sediment or other pollutants been observed leaving the project site?	☐	☐	☐	
3	Litter, debris, and chemicals are controlled from becoming a pollutant source?	☐	☐	☐	
4	Are perimeter controls (e.g. silt fence) installed and functioning properly after the storm event?	☐	☐	☐	
5	Do all operational storm sewer inlets have inlet protection in place and functioning properly after the storm event?	☐	☐	☐	

SECTION IV: RECOMMENDED CORRECTIVE ACTIONS

RCA	State Regulation (Minimum Standards)/ Construction General Permit	VA ESC Handbook Standards and Specifications	Deficiency		Description and Location of Condition Observed, Recommended Corrective Actions, and Other Comments	Recommended Corrective Action Date
			Initial	Repeat		
			☐	☐		
Photo #1[(1)]:			Photo #2:		Photo #3:	
			☐	☐		
Photo #1:			Photo #2:		Photo #3:	

(1) Photograph naming convention is: INSTALLATION ABBREVIATION_PROJECT NAME_XX/XX/2015_###

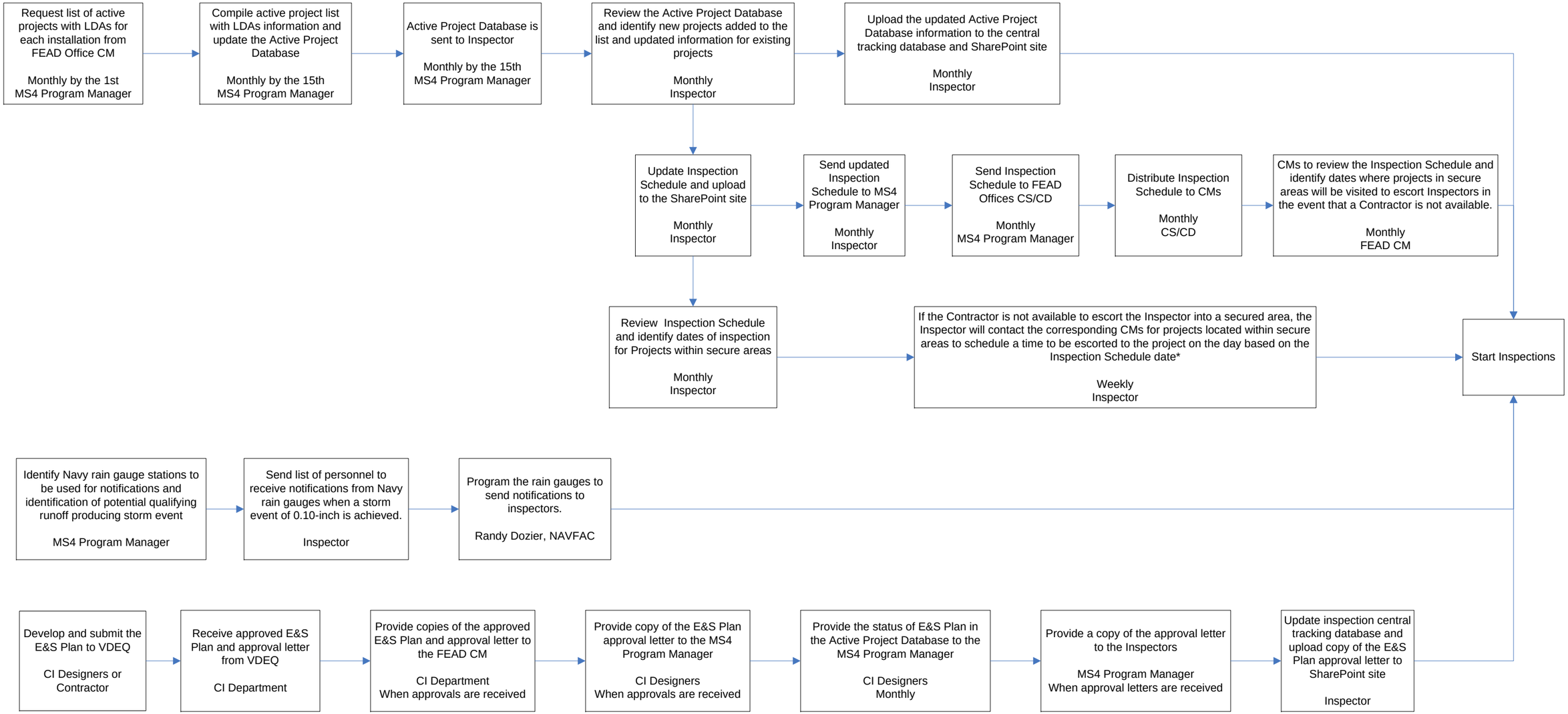
NOTES:

Attachment 7
Pre-Inspection Procedures Flowchart

TASK ORDERS WE09 & WE74 - MS4 CONSTRUCTION SITE INSPECTIONS FOR HAMPTON ROADS INSTALLATIONS

Pre-Inspection Procedures Flowchart

Updated: 08 July 2015



Notes:

- Inspectors will request and obtain a 12-month clearance for secured areas. Inspectors can be escorted to secure areas by Contractor. In the event that a Contractor is not available, the Inspector will contact the FEAD CM to be escorted into the secure area.
- CH2M HILL has been contracted under Contract Number N62470-10-D-3009, Task Order WE09 & WE74 to conduct Erosion and Sediment Control Construction Site Inspections. CH2M HILL is referred to as Inspector in this diagram.
- The SharePoint site will only be available during CH2M HILL Management of the Erosion and Sediment Control Construction Site Inspections contract period of performance.

Acronyms
CI – Capital Improvements
CM = Construction Manager
CS/CD = Construction Supervisor/Construction Director
E&S Plan = Erosion and Sediment Control Plan
FEAD = Facilities, Engineering, and Acquisitions Department
Inspector = CH2M HILL
LDA = Land Disturbing Activity
VDEQ = Virginia Department of Environmental Quality

Legend

Task

Schedule
Responsible Party

Attachment 8
Active Project Database

Municipal Separate Storm Sewer System (MS4) Permit Construction Site Inspections for Hampton Roads Installations

Active Project Database Template

PROJECT_CODE	INSTALLATION_CODE	PROJECT_NUMBER	DISTURBED_AREA	VSMP_INSPECTION_REQUIRED	PROJECT_CD_CM_SUPERVISOR	PROJECT_CM	PROJECT_ET	PROJECT_START_DATE	PROJECT_COMPLETION_DATE	WORK_IN_PLACE	LDAs_STATUS	LDAs_EXPECTED_START_DATE	LDAs_Start_Date	LDAs_End_Date	DEQ_APPROVAL_LETTER	DEQ_APPROVAL_LETTER_DATE	DEQ_TRO_PROJECT_NUMBER	PROJECT_IN_SECURED_AREA	COMMENTS	LASTUPDATEDATE
3165_MATERIAL_STORAGE	JEBLC	1341750	0.25	No	Chris Menia	Melanie Chavarria	Greg Meyers	9/3/2014	8/7/2015	0	Active		3/24/2015		Yes	11/25/2014	T-14-42	No	Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
3601_RENO	JEBLC		0.3	No	Chris Menia	Patrick Hooper	Davy Harrison	9/26/2013	10/21/2015	0.18	Active		3/24/2015		Yes	3/30/2015		No	E&S Plan submitted 07/2014 / No Approval Letter on file. Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
564_C_AVE_EXTENSION	NSN	1313779									Upcoming				Yes	8/29/2014	T-14-26		Received E&S Control Plan approval letter from DEQ. Project was added to the active project database by CH2M HILL.	3/19/2015
A128_DEMO	NSN	1106511	1.8	Yes	Mark Airaghi	Matt Cook	Mike Benson	8/1/2015	12/1/2015	0	Active but no LDAs	7/1/2015			Yes	7/11/2014	T-14-15	No	Interior construction only. Expect to start LDAs July-2015.	4/27/2015
ASOS_RELO	NSN	1314138	3.12	Yes	Mark Airaghi	Luke Castin	Kevin Catlin	11/1/2014	5/1/2015	0	Not Started				Yes	7/14/2014	T-14-16	Yes	CH2M HILL: Airfield Training required to access runway. Check with the contractor in the project trailer for escort. If contractor is not able to escort, contact Phillip Winslow to determine if the Airfield Training is needed.	3/4/2015
BH423_DBB_REPAIRS	NASO		0.77	No	Bill Shirk	Joseph Piper	James Wells	6/3/2014	4/15/2016	0.34	Active		3/20/2015		N/A			No	All building work is interior renovation. A well field will be constructed and could have associated LDA. Check project for LDA associated with the well field.	3/4/2015
CB_JOG_BATH_FACILITY	JEBLC				Chris Menia					0	Upcoming							No		3/4/2015
CB125_CRANE_STORAGE	JEBLC				Chris Menia	Melanie Chavarria	Mike Welch	9/22/2014	7/24/2015	0	Not Started		6/16/2015					No	Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
CB125_KALMAR_STORAGE	JEBLC	1358441	0.31	No	Chris Menia	Melanie Chavarria	Mike Welch	9/25/2014	6/12/2015	0	Not Started		6/15/2015		Yes	11/19/2014	T-14-37	No	Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
CEP156_AMMONIA	NSN		2.53	Yes	Mark Airaghi	Sheldon Johnson		2/1/2013	2/1/2015	1	Complete							No	CH2M HILL: Identified project is 100% complete during the site visit conducted on 15-JAN-2015. Meeting attendees Phillip Winslow and Lindsey Carr.	3/4/2015
CEP210_DEMO	NSN			No	Mark Airaghi	Mark Mainous	Mike Benson	1/15/2015	3/1/2015	0.02	Active		3/16/2015	4/29/2015	N/A			No	Over 10,000 sf Under 1 Acre.	4/27/2015
CEP66_DEMO	NSN	1332958		No	Mark Airaghi	Mark Mainous	Mike Benson	12/1/2014	12/1/2014	0.03	Not Started				Yes	8/26/2014	T-14-18	No	Over 10,000 sf Under 1 Acre.	3/4/2015
DB_SOF_DOG	DN		1.9	Yes	Bill Shirk	Hollis Jennings	James Wells	7/9/2013	4/15/2014	0.73	Active		3/26/2015		N/A			Yes	Project is nearing completion of land disturbing activities. Expect site work to be completed Feb/Mar 2015. Denotes project is within secured area. Contact Project CM or CM Supervisor to identify inspection schedule and obtain access to project locations. Disturbed acreage of 0.86 includes both projects under D/B SOF.	3/4/2015
DB_SOF_LOGISTICS	DN		3	Yes	Bill Shirk	Hollis Jennings	James Wells	7/9/2013	4/15/2014	0.73	Active		3/26/2015		N/A			Yes	Project is nearing completion of land disturbing activities. Expect site work to be completed Feb/Mar 2015. Denotes project is within secured area. Contact Project CM or CM Supervisor to identify inspection schedule and obtain access to project locations. Disturbed acreage of 0.86 includes both projects under D/B SOF.	3/4/2015
GATOR_SEWER	JEBLC				Chris Menia	Greg Ray	Brett Standley	6/6/2014	1/1/2015	0	Not Started							No	Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
HQ_SACT	NSA		21	Yes	Mark Airaghi	Reuben Trant	Ray Barnhill	3/1/2012	10/1/2015	0.75	Active		3/18/2015		N/A			No		4/27/2015
INDOOR_RANGE	JEBFS				Chris Menia					0	Upcoming								RFP out for bid; Hasn't been awarded.	3/4/2015
KK_KN_KJ_IF_BARRACKS	NSN		2.375	Yes	Mark Airaghi	Charles Stanton		1/1/2013	1/1/2015	1	Complete				N/A			No	CH2M HILL: Identified project is 100% complete during the site visit conducted on 15-JAN-2015. Meeting attendees Phillip Winslow and Lindsey Carr.	4/27/2015
KM_KL_KQ_BARRACKS	NSN		1.54	Yes	Mark Airaghi	Charles Stanton	Bob Parks	7/1/2014	9/23/2015	0.2	Active		3/19/2015		N/A			No		4/27/2015
LAYDOWN_YARD_3090	JEBLC	1353020									Upcoming				Yes	11/17/2014	T-14-38		Received E&S Control Plan approval letter from DEQ. Project was added to the active project database by CH2M HILL.	3/19/2015
M48_M110_DEMO	NSN	1354445		No							Upcoming				Yes	5/14/2015	TRO-15-85		Received E&S Control Plan approval letter from DEQ. Project was added to the active project database by CH2M HILL.	5/20/2015
MWR_YOUTH_CENTER	NASO		3.8	Yes	Bill Shirk	Harold Bishop	Art Sanchez	5/13/2014	2/15/2014		Active		3/20/2015		N/A			No		3/4/2015
N84_AUTO_SKILL	JEBLC				Chris Menia			7/1/2015		0	Upcoming	7/1/2015						No		3/4/2015
NEX_CAR_WASH	NSN		1.6	Yes	Mark Airaghi	John Vogt	Wayne Foster	2/1/2014	2/1/2015	0	Active		3/18/2015	5/14/2015	N/A			No		4/27/2015
NEX_CAR_WASH_DEMO_BUILD	JEBLC				Chris Menia					0	Not Started							No		3/4/2015
NO_PROJECT_NSAHR-PA	NSAHR-PA		0	N/A	Not Applicable	Not Applicable	Not Applicable			0	No Active Project							No	Place holder for Naval Medical Center Portsmouth.	3/4/2015
NO_PROJECT_SCA	SCA		0	N/A	Not Applicable	Not Applicable	Not Applicable			0	No Active Project							No	Place holder for Scott Center Annex.	3/4/2015
P123_BACH_QTERS	NSN		14	Yes	Mark Airaghi	Harrison Dudley	Mike Benson	4/1/2013	6/1/2015	0.79	Active		3/19/2015		N/A			No	Project does not have an approved E&S Plan. The project started prior to the Navy granting VDEQ authority to approve the E&S Plans.	3/16/2015
P165_SOF_COMBAT_FACILITY	JEBLC		3.23	Yes	Chris Menia	Jeff Miller	Davy Harrison	9/24/2013	11/26/2015	0.24	Active		3/23/2015		In Process			No	E&S Plan submitted 05/2014. No Approval Letter on file. Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre. There are two separate areas associated with P165, a warehouse off of Gator Road and an administration building in proximity to building 3897.	3/4/2015
P197_STEAM	NSA		0.97	No	Mark Airaghi	Reuben Trant	Jan Sutton	6/1/2013	5/1/2015	0.74	Active		3/19/2015		N/A			No		4/24/2015
P4_W193_P28_P86_DEMO	NSN		2.73	Yes	Mark Airaghi	Michael Howland	Bob Parks	12/1/2014	4/1/2015	0	Active		3/17/2015		Yes	7/8/2014		No		4/26/2015
P473_SOF_OPS_FACILITY	JEBLC		3.68	Yes	Chris Menia	Jeff Miller	Mike Welch	9/30/2013	12/27/2015	0.16	Active		3/23/2015		Yes	1/29/2015		No	Dates Awarded and Proposed. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
P504_VEH_STORAGE	DN		0.39	No	Bill Shirk	Bill Shirk	James Wells				Active		3/25/2015		N/A			No	No permit was obtained. Inspection is still required. Project is close to completion.	4/27/2015
P513_A_SCHOOL_BARRACKS	DN		4.4	Yes	Bill Shirk	Brandon Wade	Art Sanchez	4/14/2014	12/15/2014	0.2	Active		3/25/2015		Yes	4/22/2015		No	E&S Plan submitted; DEQ Comments Received 08/01/2014. Resubmittal Required.	3/4/2015
P527_SOF_PER_GATE	DN		25.88	Yes	Bill Shirk	Bill Shirk	James Wells	3/13/2013	4/15/2014	0.58	Active		3/26/2015		N/A			Yes	The Main Gate Improvement is the traffic circle being constructed on the Dam Neck Annex near the main gate. This project is reapplying for its Construction General Permit as the previous permit expired on July 1, 2014.	4/27/2015
P815_AERIAL_TARGET	DN		2.3	Yes	Bill Shirk	Hollis Jennings	James Wells			0	On Hold							No	UXO has been found within the project area resulting in a stop work order being issued. CH2M HILL will perform Digital Geophysical Mapping (DGM) survey of the project area. To do so, Walbridge Aldinger (contractor) will be required to remove the asphalt parking lot so the DGM survey can be conducted and UXO identified. The specific start dates are unknown at this time. In addition, Walbridge Aldinger will be responsible for repaving/resurfacing the existing entrance/exit road into the aerial target operations area. This portion of the project has also been issued a Stop Work Order (latitude: 36.766209; longitude: -75.954944).	3/4/2015

Municipal Separate Storm Sewer System (MS4) Permit Construction Site Inspections for Hampton Roads Installations

Active Project Database Template

PROJECT_CODE	INSTALLATION_CODE	PROJECT_NUMBER	DISTURBED_AREA	VSMP_INSPECTION_REQUIRED	PROJECT_CD_CM_SUPERVISOR	PROJECT_CM	PROJECT_ET	PROJECT_START_DATE	PROJECT_COMPLETION_DATE	WORK_IN_PLACE	LDAs_STATUS	LDAs_EXPECTED_START_DATE	LDAs_Start_Date	LDAs_End_Date	DEQ_APPROVAL_LETTER	DEQ_APPROVAL_LETTER_DATE	DEQ_TRO_PROJECT_NUMBER	PROJECT_IN_SECURED_AREA	COMMENTS	LASTUPDATEDATE
RODGZ_RANGE	JEBLC	132114	2.75	Yes	Chris Menia	Peter Rieger	Mike Welch	9/30/2014	5/29/2015	0	Active				Yes	3/23/2015	T-14-36	Yes	Project on hold. Dates Awarded and Proposed. Denotes project is within secured area. Contact Project CM or CM Supervisor to identify inspection schedule and obtain access to project locations. Project >10,000 sf. Need to identify during initial site visit total disturbed area and if it is over one acre.	3/4/2015
SP264_BULKHEAD	NSN		4.16	Yes	Mark Airaghi	Bill House	Wayne Foster	3/1/2014	2/1/2015	1	Complete		3/16/2015	3/16/2015	N/A			No	E&S Plan submitted; Not Approved. There is no permit coverage under the CGP and no approved E&S plan for the bulkhead repair project. Final inspection conducted.	4/27/2015
STEAM_PLANT_DEMO	NASO		2.82	Yes	Bill Shirk	Harold Bishop	Dave Pigeon	3/23/2015		0	Active	3/23/2015	5/21/2015		Yes	2/2/2015		No	Project had pre-construction meeting on March 12, 2015. Work is planned to start on March 23rd contingent on the contractor receiving the CGP coverage from the VDEQ. The project is anticipated to last 4-5 months.	3/16/2015
U112_RENO	NSN		2.2	Yes	Mark Airaghi	Mark Mainous	Wayne Foster	1/15/2015	12/1/2015	0	Not Started							No	Contractors mobilized construction trailer.	3/4/2015
U130_FM	NSN			No	Mark Airaghi	Matt Cook	Wayne Foster	6/1/2014	3/1/2015	0.43	Active		3/19/2015		N/A			No	Over 10,000 sf Under 1 Acre.	4/27/2015
V52_DEMO	NSN	1320328	2.3	Yes	Mark Airaghi	Bill House	Kevin Catlin	7/1/2014	3/1/2015		Active but no LDAs				Yes	3/3/2015	T-14-48	No	CH2M HILL: Ongoing interior demolition. Should be checked monthly as project work is not consistent VDEQ letter includes the approval of the Stormwater Management and E&S Control Plan.	3/18/2015
V70_PARKING	NSN	1351756		No	Mark Airaghi	John Vogt	Kevin Catlin	1/15/2015	4/1/2015	0	Not Started				Yes	3/3/2015	T-14-44	No	Over 10,000 sf Under 1 Acre.	3/18/2015
VET_CLINIC	NSN	1153471	2.3	Yes	Mark Airaghi	Bill House	Kevin Catlin	3/1/2014	9/1/2015	0.35	Active		3/17/2015		Yes	8/25/2014	Not Provided	No		4/27/2015
Z140_EXTERIOR	NSN		2.3	Yes	Mark Airaghi	Michael Howland	Glenn Ames	1/1/2015	8/1/2015	0.01	Not Started				Yes	1/14/2015		No	CH2M HILL: Exterior Repairs only. Drive by to confirm no LDAs will occur in the parking lot.	3/4/2015

Attachment 9
Inspection Schedule

June 29, 2015 - July 5, 2015

June 2015

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July 2015

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Monday, June 29

8:00am - 5:00pm JEB Little Creek (P-165 SOF Combat Services Support Facility (including Administration Building); P-473 SOF OPS Facility; SEABEEs Crane Storage Facility)

Tuesday, June 30

8:00am - 5:00pm JEB Little Creek (Construct Material Storage Facility adjacent to Building 3165; Building 3601 Renovations; Kalmar Storage Building; Rodriguez Range)

Wednesday, July 1

8:00am - 5:00pm Dam Neck Annex (DN: SECURE DEVGRU - D/B SOF Logistics Support Facility and Military Working Dog Facility; P-527, SOF Perimeter & Main Gate Improvements; P-527, Visitors Center)

Thursday, July 2

8:00am - 5:00pm Dam Neck Annex and Naval Air Station Oceana (NASO: MWR Youth Center; DBB Repairs BH-423; Demolition of Steam Plant; DN: P-513, A School Barracks; P-504 Vehicle Storage Facility)

Friday, July 3

Notes

Notes

Note: The bi-weekly inspection schedule will be updated monthly or when new projects with LDAs are added to the active project database.

Attachment 10
VDEQ Approval Letter Example

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

July 14, 2014

Mr. James W. Nelms, P.E.
NAVFAC MIDLANT, PWD Norfolk, FEAD
9742 Maryland Ave., Bldg Z-140, Room 114
Norfolk, VA 23511
james.w.nelms@navy.mil

RE: U.S. Navy Project No. 1314138
Relocate ASOS
Naval Station Norfolk
Erosion and Sediment Control Plan Approval
TRO Project No. T-14-16

Dear Mr. Nelms:

Thank you for the submission of the above referenced plans to our office for review and approval in accordance with the *Virginia Erosion and Sediment Control Law and Regulations*. Three (3) stamped and signed copies of the approved plan are enclosed. One (1) copy must remain on site at all times.

Although your plan is approved, please be advised that the Minimum Standards established in Section 40 of the *Virginia Erosion and Sediment Control Regulations* (9VAC25-840) apply to all land-disturbing activities that evolve from this project. In addition, no changes may be made to the approved plan without first obtaining approval from this office.

Additionally, prior to engaging in land-disturbing activities, the Navy, or awarded contractor, is required to obtain a VSMP Construction General Permit in accordance with the *Virginia Stormwater Management Act.* Pursuant to 9VAC25-880, land-disturbing activities that result in land disturbance equal to or greater than one acre must be registered for coverage under the General Permit for Discharges of Stormwater from Construction Activities.

We ask that you please notify this office at least one (1) week before the preconstruction conference and at least one (1) week before any land-disturbance associated with this project begins. Prompt notice is necessary, as we will be inspecting the installation and maintenance of all erosion control measures. The Registered Land Disturber (RLD) should also be present at the pre-construction meeting.

Please do not hesitate to contact me at (757) 518-2003 or erin.belt@deq.virginia.gov should you have any questions or comments regarding this project.

Sincerely,

Erin Ervin Belt

Erin Ervin Belt
Stormwater Compliance Specialist

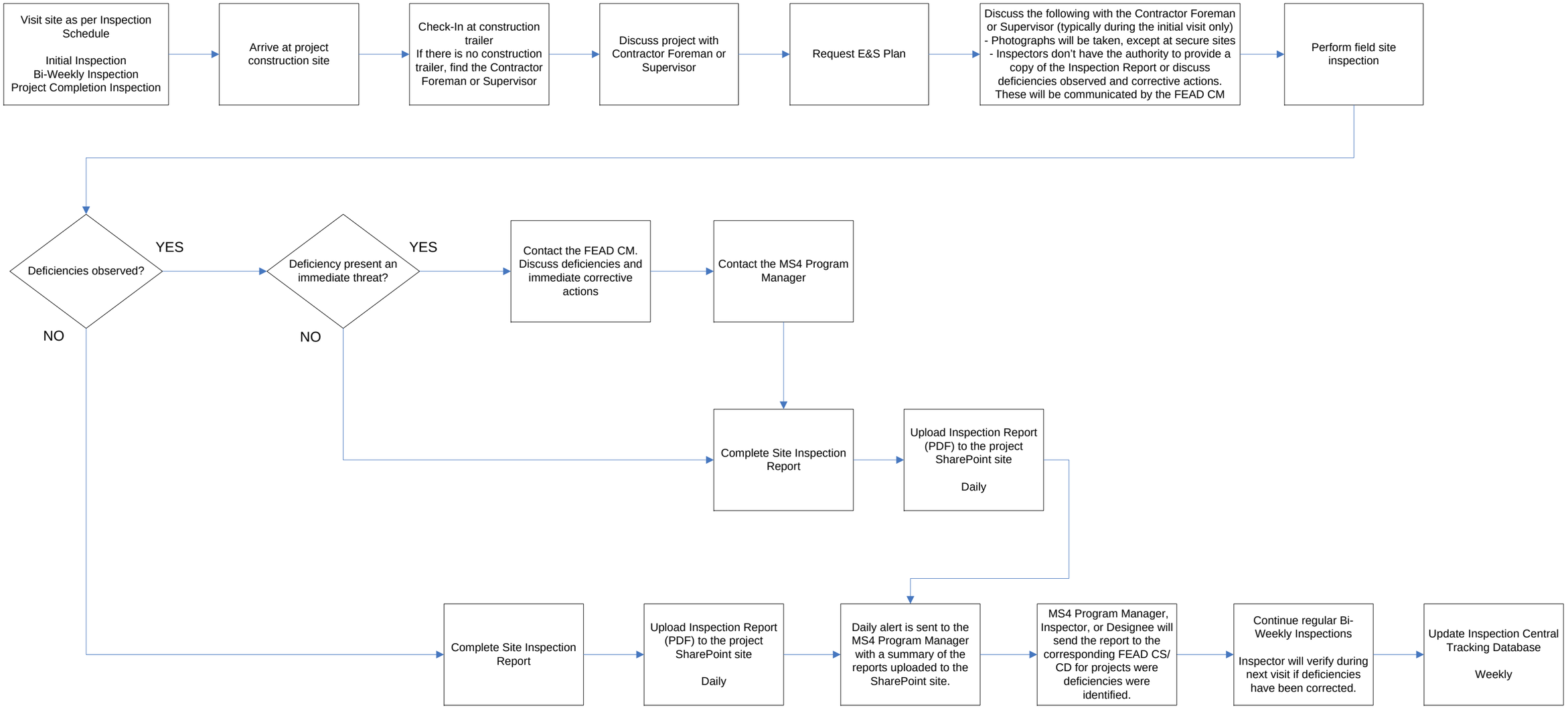
Cc: Phillip Winslow, NAVFAC Environmental Compliance Representative
Noah M. Hill, Stormwater Compliance Manager
File

Attachment 11
Construction Site Inspection Procedures Flowchart

TASK ORDERS WE09 & WE74 - MS4 CONSTRUCTION SITE INSPECTIONS FOR HAMPTON ROADS INSTALLATIONS

Construction Site Inspection Procedures

Updated: 09 September 2015



Acronyms
CM = Construction Manager
CS/CD = Construction Supervisor/Construction Director
E&S Plan = Erosion and Sediment Control Plan
FEAD = Facilities, Engineering, and Acquisitions Department
Inspector = CH2M HILL

Notes:
- Some projects with LDAs may not have a construction trailer. If that occurs, identify the Contractor Supervisor or Foreman. If no one is available on site, conduct a drive-by inspection and note it in the Site Inspection Report.
- Projects with no active LDAs or interior demolition/work will be visited once a month to verify if there are LDAs. If there are no LDAs, complete the Site Visit Report indicating that there are no active LDAs.

Attachment 12
Erosion and Sediment Control
Site Inspection Field Form

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, Va. 23511

SITE INSPECTION FIELD FORM

SECTION I: PROJECT INFORMATION

Project Name:	Total Disturbed Acreage:	
Project Location:	Installation:	
Inspector:	Date of Inspection:	Time:
Weather Conditions:		
NAVFAC Construction Manager:	Project Operator:	
Inspection Type: ☐ Initial Inspection ☐ Initial/48-hour Runoff Producing Storm Event Inspection ☐ Bi-Weekly Inspection ☐ Bi-Weekly/48-hour Runoff Producing Storm Event Inspection ☐ 48-hour Runoff Producing Storm Event Inspection ☐ Project Completion Inspection	Present at Inspection:	
VSMP VAR10 Construction Inspection Required: ☐ *Complete Section IV*	VSMP Permit Number:	
E&S Control Plan Approval Letter Received:	E&S Control Plan Approval Letter Date:	

SECTION II: STAGE OF CONSTRUCTION

Pre-Construction ☐	Building Construction ☐	Construction of SWM Facilities ☐
Clearing & Grubbing ☐	Finish Grading ☐	Maintenance of SWM Facilities ☐
Rough Grading ☐	Final Stabilization ☐	Other: _____ ☐
Mobilization ☐	Interior Construction ☐	

PROJECT DOCUMENTATION INSPECTION

SECTION III: EROSION AND SEDIMENT CONTROL

Item	**Virginia E&S Control Law and Regulations**	***Yes***	***No***	***N/A***	***Notes***
1	Does the Project have an E&S control plan onsite?	☐	☐	☐	
2	Has the onsite E&S Control Plan been approved by the VESCP Authority?	☐	☐	☐	
5	Is the project operator conducting routine inspections of the installed E&S control measures?	☐	☐	☐	

SECTION IV: VSMP PERMIT COMPLIANCE (Projects disturbing land equal or greater than 1 acre)

Item	VAR10 Permit Required Items; 9VAC25-880-70	*Yes*	*No*	*N/A*	*Notes*
1	Project has received permit coverage to discharge stormwater under the Virginia Construction Stormwater General Permit?	☐	☐	☐	
2	Is a copy of the Permit coverage letter posted onsite?	☐	☐	☐	
3	Does the Operator have a SWPPP onsite?	☐	☐	☐	
4	Does the SWPPP identify the "Qualified Personnel" conducting inspections for the Operator?	☐	☐	☐	
5	Is the Operator conducting site inspections at the required frequency identified in the General Permit?	☐	☐	☐	

VA ESC HANDBOOK INSPECTION CHECKLIST

Item	**Checklist Questionnaire**	*Yes*	*No*	*N/A*	*Notes*
1	MS-1: Have all denuded areas requiring temporary or permanent stabilization been stabilized? (seeded, mulched, graveled)	☐	☐	☐	
2	MS-2: Are soil stockpiles adequately stabilized with seeding and/or controlled with sediment trapping measures?	☐	☐	☐	
3	MS-3: Does permanent vegetation provide adequate stabilization?	☐	☐	☐	
4	MS-4: Have sediment trapping measures (e.g. sediment basin, traps, perimeter dikes, sediment barriers, etc.) been constructed as a first step in LDA?	☐	☐	☐	
5	MS-5: For perimeter sediment trapping measures, are earthen structures stabilized?	☐	☐	☐	
6	MS-6: Are sediment basins installed where needed?	☐	☐	☐	
7	MS-7: Are finished cut and fill slopes adequately stabilized to minimize erosion?	☐	☐	☐	
8	MS-8: Are on-site channels, flumes, or slope drainage structures adequately stabilized?	☐	☐	☐	
9	MS-9: Is adequate drainage or other protection provided where water seeps from a slope?	☐	☐	☐	
10	MS-10: Do all operational storm sewer inlets have adequate inlet protection?	☐	☐	☐	
11	MS-11: Are stormwater conveyance channels adequately stabilized?	☐	☐	☐	
12	MS-12: Is in-stream construction conducted using measures to minimize channel damage?	☐	☐	☐	
13	MS-13: Are temporary stream crossings of non-erodible material installed where applicable?	☐	☐	☐	
14	MS-14: Are all applicable federal, state, and local regulations pertaining to working in or crossing live watercourses met?	☐	☐	☐	
15	MS-15: Is necessary restabilization of in-stream construction complete?	☐	☐	☐	
16	MS-16: Are utility trenches stabilized properly?	☐	☐	☐	
17	MS-17: Are soil and mud kept off public roadways where construction vehicle access routes intersect paved or public roads?	☐	☐	☐	
18	MS-18: Have all temporary control structures that are no longer needed been removed? Have all control structure repairs and sediment removal been performed?	☐	☐	☐	
19	MS-19: Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff?	☐	☐	☐	

SITE INSPECTION

SECTION III: EROSION AND SEDIMENT CONTROL

Item	Virginia E&S Control Law and Regulations	*Yes*	*No*	*N/A*	*Notes*
3	Are E&S Control measures installed in accordance with the approved plan?	☐	☐	☐	
4	Is the project in compliance with the 19 minimum standards of the Erosion and Sediment Control Regulations?	☐	☐	☐	
6	Does the project have appropriate controls in place to prevent non-stormwater discharges to the MS4, such as: wastewater, concrete washout, fuels and oils, construction waste, and other illicit discharges?	☐	☐	☐	
7	Has sediment or other pollutants been observed leaving the project site?	☐	☐	☐	

SECTION IV: VSMP PERMIT COMPLIANCE (Projects disturbing land equal or greater than 1 acre)

Item	VAR10 Permit Required Items; 9VAC25-880-70	*Yes*	*No*	*N/A*	*Notes*
6	Stabilization control measures are being utilized?	☐	☐	☐	
7	Structural control measures designed and installed?	☐	☐	☐	
8	Control measures are maintained?	☐	☐	☐	
9	Litter, debris, and chemicals are controlled from becoming a pollutant source?	☐	☐	☐	

CORRECTIVE ACTIONS IDENTIFIED DURING MOST RECENT INSPECTION

Refer to Most Recent Inspection Report

Inspection Date	RCA	Status		Description of Addressed Corrective Action
		Corrected	Not Addressed	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	

RECOMMENDED CORRECTIVE ACTIONS (THIS INSPECTION)

State Regulation (Minimum Standards)/Construction General Permit	*VA ESC Handbook Standards and Specifications*		
MS1 – Soil Stabilization MS2 – Stockpiles & Borrow Area MS3 – Permanent Stabilization MS4 – Perimeter Controls MS5 – Earthen Structures MS6(A) – Sediment Traps MS6(B) – Sediment Basin MS7 – Cut and Fill Slopes MS8 – Concentrated Runoff MS9 – Water Seepage MS10 – Storm Inlet MS11 – Conveyance Channel MS12 – Minimize Encroachment to Live Watercourse MS13 – Live Watercourse Crossing MS14 – Working in a Live Watercourse MS15 – Bed and Banks of a Watercourse MS16 – Underground Utility MS17 – Transport of Sediment onto Paved Surfaces MS18 – Temporary ESC Measures Removed MS19 – Downstream Properties ESC Plan - VA Erosion and Sediment Control Plan Regulation 9VAC25-840 SWM Program - VA Stormwater Management Program Permit Regulation 9VAC25-870 Other	3.01 – Safety Fence 3.02 – Construction Entrance 3.03 – Construction Road Stabilization 3.04 – Straw Bale Barrier 3.05 – Silt Fence 3.06 – Brush Barrier 3.07 – Storm Drain Inlet Protection 3.08 – Culvert Inlet Protection 3.09 – Temporary Diversion Dike 3.10 – Temporary Fill Diversion 3.11 – Temporary Right-of-Way Diversion 3.12 - Diversion 3.13 – Temporary Sediment Trap 3.14 – Temporary Sediment Basin	3.15 – Temporary Slope Drain 3.16 – Paved Flume 3.17 – Stormwater Conveyance Channel 3.18 – Outlet Protection 3.19 – Riprap 3.20 – Rock Check Dams 3.21 – Level Spreader 3.22 – Vegetative Streambank Stabilization 3.23 – Structural Streambank Stabilization 3.24 – Temporary Vehicular Stream Crossing 3.25 – Utility Stream Crossing 3.26 – Dewatering Structure	3.27 – Turbidity Curtain 3.28 – Subsurface Drain 3.29 – Surface Roughening 3.30 - Topsoiling 3.31 – Temporary Seeding 3.32 – Permanent Seeding 3.33 - Sodding 3.34 – Bermudagrass and Zoysiagrass Establishment 3.35 - Mulching 3.36 – Soil Stabilization Blankets and Matting 3.37 – Trees, Shrubs, Vines and Ground Covers 3.38 – Tree Preservation and Protection 3.39 – Dust Control Not Applicable

Note: Use the above table to assist in completing *Section V: Recommended Corrective Actions* below.

SECTION V: RECOMMENDED CORRECTIVE ACTIONS

RCA	State Regulation (Minimum Standards)/ Construction General Permit	VA ESC Handbook Standards and Specifications	Deficiency		Description and Location of Condition Observed, Recommended Corrective Actions, and Other Comments	Recommended Corrective Action Date
			Initial	Repeat		
			☐	☐		
Photo #1[(1)]:			Photo #2:		Photo #3:	
			☐	☐		
Photo #1:			Photo #2:		Photo #3:	
			☐	☐		
Photo #1:			Photo #2:		Photo #3:	

RCA	State Regulation (Minimum Standards)/ Construction General Permit	VA ESC Handbook Standards and Specifications	Deficiency		Description and Location of Condition Observed, Recommended Corrective Actions, and Other Comments	Recommended Corrective Action Date
			Initial	Repeat		
			☐	☐		
Photo #1:			Photo #2:		Photo #3:	
			☐	☐		
Photo #1:			Photo #2:		Photo #3:	
Photo #1:			Photo #2:		Photo #3:	
Photo #1:			Photo #2:		Photo #3:	
Photo #1:			Photo #2:		Photo #3:	
Photo #1:			Photo #2:		Photo #3:	

(1) Photograph naming convention is: INSTALLATION ABBREVIATION_PROJECT NAME_XX/XX/2015_###

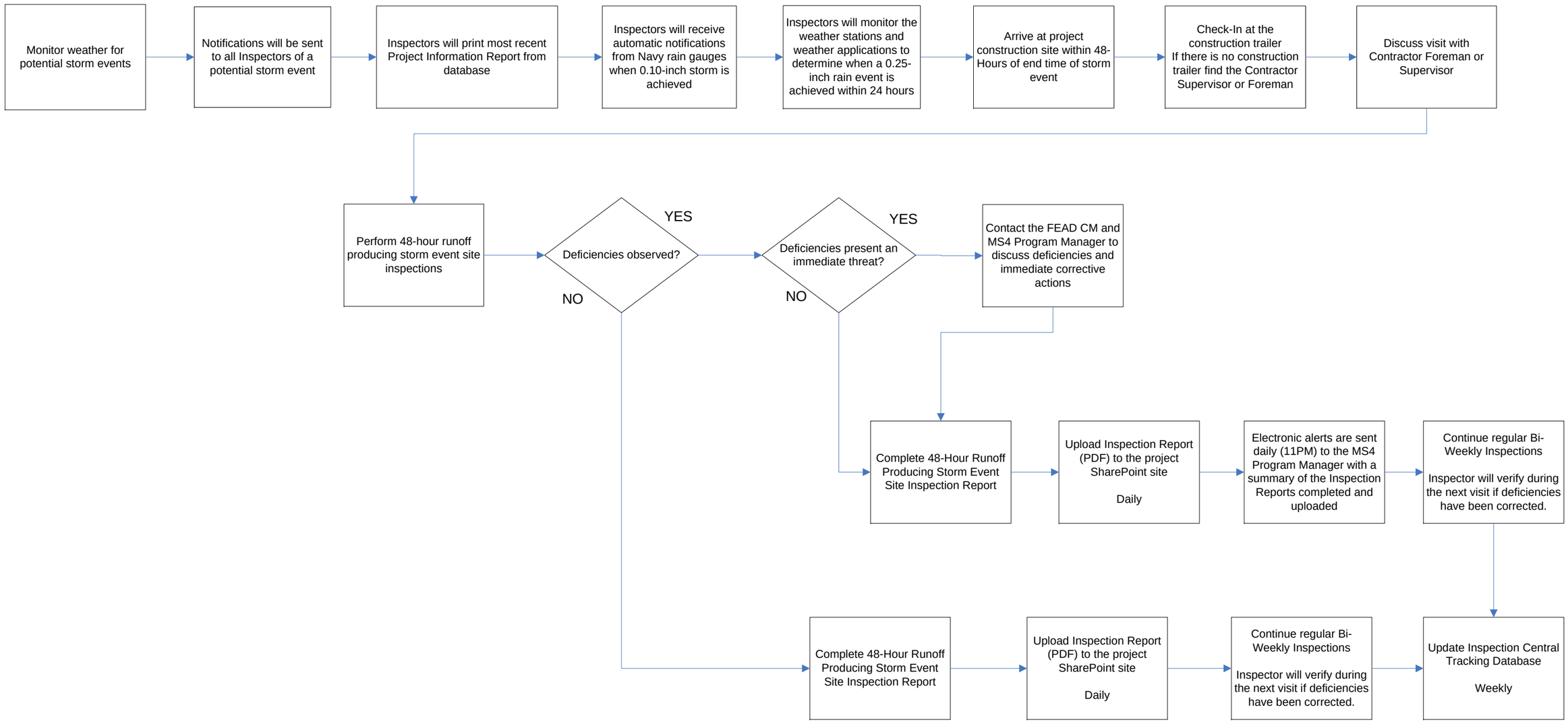
NOTES:

Attachment 13
48-Hour Runoff Producing Storm Event Procedures Flowchart

TASK ORDERS WE09 & WE74 - MS4 CONSTRUCTION SITE INSPECTIONS FOR HAMPTON ROADS INSTALLATIONS

48 Hour Runoff Producing Storm Event Inspection Procedures

Updated: 08 July 2015



Acronyms
CM = Construction Manager
CS/CD = Construction Supervisor/Construction Director
E&S Plan = Erosion and Sediment Control Plan
FEAD = Facilities, Engineering, and Acquisitions Department
Inspector = CH2M HILL

Notes:
- Contractor trailers for projects located in secured areas are located outside the secured areas.
- Inspectors have been provided a 12-month security clearance to DEVGRU at Dam Neck Annex. If visiting the site, the Contractor will escort you to the construction site. If the Contractor is not available, contact the corresponding CM.
- Inspectors will not conduct full inspections during 48-hour runoff producing storm events. Full inspections will only be conducted if the project was scheduled to have a bi-weekly inspection on the day the 48-hour runoff producing storm event inspection is been conducted.
- Inspectors will not verify if prior RCAs have been addressed. Prior RCAs will only be verified during bi-weekly inspections.

Attachment 14
48-Hour Runoff Producing Storm Event Inspection Schedule

MS4 CONSTRUCTION SITE INSPECTIONS FOR HAMPTON ROADS INSTALLATIONS

48-HOUR RUNOFF PRODUCING STORM EVENT INSPECTIONS

Inspection Schedule

Updated: 24 June 2015

INSPECTOR 1 – Celeste	
Day 1 Naval Station Norfolk and Naval Support Activity Hampton Roads 0700 – 1600 NSA: • HQ SACT Addition *[HQ_SACT]* • P-197 Steam Decentralization *[P197_STEAM]* NSN: • Demolition of Buildings P-4, W-193, P-28 and P-86 [P4_W193_P28_P86_DEMO] • Barracks KM/KL/KQ *[KM_KL_KQ_BARRACKS]* • P-123 Bachelor Quarters Homeport Ashore • *[P123_BACH_QTERS]* • U-130 Force Main *[U130_FM]* • Veterinary Clinic *[VET_CLINIC]* • Exterior Repairs Z-140 *[Z140_EXTERIOR]*	Day 2 Naval Station Norfolk and Naval Support Activity Hampton Roads 0700 – 1600
INSPECTOR 2 – Kathryn	
Day 1 Dam Neck Annex and Naval Air Station Oceana 0700 – 1600 DN: • P-513, A School Barracks *[P513_A_SCHOOL_BARRACKS]* • P-504 Vehicle Storage Facility *[P504_VEH_STORAGE]* NASO: • MWR Youth Center *[MWR_YOUTH_CENTER]* • DBB Repairs BH-423 *[BH423_DBB_REPAIRS]* • Demolition of Steam Plant *[STEAM_PLANT_DEMO]*	Day 2 Dam Neck Annex 0700 – 1600 • P-527, SOF Perimeter & Main Gate Improvements & Visitors Center *[P527_SOF_PER_GATE]* • SECURE DEVGRU - D/B SOF Logistics Support Facility and Military Working Dog Facility *[DB_SOF_DOG], [DB_SOF_LOGISTICS]*

[DENOTES PROJECT CODE]

Attachment 15
48-Hour Runoff Producing Storm Event Inspection Field Form

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, Va. 23511

48 HOUR RUNOFF PRODUCING STORM EVENT FIELD INSPECTION FORM

SECTION I: PROJECT INFORMATION

Project Name:	Total Disturbed Acreage:	
Project Location:	Installation:	
Inspector:	Date of Inspection:	Time:
Weather Conditions:	Precipitation (inches):	
NAVFAC Construction Manager:	Project Operator:	
Inspection Type: ☐ 48-hour Runoff Producing Storm Event Inspection	Present at Inspection:	

SECTION II: STAGE OF CONSTRUCTION

Pre-Construction ☐	Building Construction ☐	Construction of SWM Facilities ☐
Clearing & Grubbing ☐	Finish Grading ☐	Maintenance of SWM Facilities ☐
Rough Grading ☐	Final Stabilization ☐	Other: _____ ☐
Mobilization ☐	Interior Construction ☐	

SECTION III: SITE INSPECTION

Item	**Virginia E&S Control Law and Regulations**	***Yes***	***No***	***N/A***	***Notes***
1	Does the project have appropriate controls in place to prevent non-stormwater discharges to the MS4, such as: wastewater, concrete washout, fuels and oils, construction waste, and other illicit discharges?	☐	☐	☐	
2	Has sediment or other pollutants been observed leaving the project site?	☐	☐	☐	
3	Litter, debris, and chemicals are controlled from becoming a pollutant source?	☐	☐	☐	
4	Are perimeter controls (e.g. silt fence) installed and functioning properly after the storm event?	☐	☐	☐	
5	Do all operational storm sewer inlets have inlet protection in place and functioning properly after the storm event?	☐	☐	☐	

SECTION IV: RECOMMENDED CORRECTIVE ACTIONS

RCA	State Regulation (Minimum Standards)/ Construction General Permit	VA ESC Handbook Standards and Specifications	Deficiency		Description and Location of Condition Observed, Recommended Corrective Actions, and Other Comments	Recommended Corrective Action Date
			Initial	Repeat		
			☐	☐		
Photo #1[(1)]:			Photo #2:		Photo #3:	
			☐	☐		
Photo #1:			Photo #2:		Photo #3:	

(1) Photograph naming convention is: INSTALLATION ABBREVIATION_PROJECT NAME_XX/XX/2015_###

NOTES:

State Regulation (Minimum Standards)/Construction General Permit	*VA ESC Handbook Standards and Specifications*		
MS1 – Soil Stabilization MS2 – Stockpiles & Borrow Area MS3 – Permanent Stabilization MS4 – Perimeter Controls MS5 – Earthen Structures MS6(A) – Sediment Traps MS6(B) – Sediment Basin MS7 – Cut and Fill Slopes MS8 – Concentrated Runoff MS9 – Water Seepage MS10 – Storm Inlet MS11 – Conveyance Channel MS12 – Minimize Encroachment to Live Watercourse MS13 – Live Watercourse Crossing MS14 – Working in a Live Watercourse MS15 – Bed and Banks of a Watercourse MS16 – Underground Utility MS17 – Transport of Sediment onto Paved Surfaces MS18 – Temporary ESC Measures Removed MS19 – Downstream Properties ESC Plan - VA Erosion and Sediment Control Plan Regulation 9VAC25-840 SWM Program - VA Stormwater Management Program Permit Regulation 9VAC25-870 Other	3.01 – Safety Fence 3.02 – Construction Entrance 3.03 – Construction Road Stabilization 3.04 – Straw Bale Barrier 3.05 – Silt Fence 3.06 – Brush Barrier 3.07 – Storm Drain Inlet Protection 3.08 – Culvert Inlet Protection 3.09 – Temporary Diversion Dike 3.10 – Temporary Fill Diversion 3.11 – Temporary Right-of-Way Diversion 3.12 - Diversion 3.13 – Temporary Sediment Trap 3.14 – Temporary Sediment Basin	3.15 – Temporary Slope Drain 3.16 – Paved Flume 3.17 – Stormwater Conveyance Channel 3.18 – Outlet Protection 3.19 – Riprap 3.20 – Rock Check Dams 3.21 – Level Spreader 3.22 – Vegetative Streambank Stabilization 3.23 – Structural Streambank Stabilization 3.24 – Temporary Vehicular Stream Crossing 3.25 – Utility Stream Crossing 3.26 – Dewatering Structure	3.27 – Turbidity Curtain 3.28 – Subsurface Drain 3.29 – Surface Roughening 3.30 - Topsoiling 3.31 – Temporary Seeding 3.32 – Permanent Seeding 3.33 - Sodding 3.34 – Bermudagrass and Zoysiagrass Establishment 3.35 - Mulching 3.36 – Soil Stabilization Blankets and Matting 3.37 – Trees, Shrubs, Vines and Ground Covers 3.38 – Tree Preservation and Protection 3.39 – Dust Control Not Applicable

Attachment 16
Site Visit Report

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, Va. 23511

SITE VISIT REPORT

SECTION I: PROJECT INFORMATION

Project Name:	Total Disturbed Acreage:	
Project Location:	Installation:	
Inspector:	Date of Inspection:	Time:
Weather Conditions:		
NAVFAC Construction Manager:	Project Operator:	
Inspection Type: ☐ Site Visit – No Active LDAs	Present at Inspection:	
VSMP VAR10 Construction Inspection Required: ☐	VSMP Permit Number:	
E&S Control Plan Approval Letter Received:	E&S Control Plan Approval Letter Date:	

SECTION II: STAGE OF CONSTRUCTION

Interior Construction ☐ Mobilization ☐ Other: _____ ☐

NOTES:

Attachment 17
Site Visit Status Report

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, VA 23511

SITE VISITS STATUS REPORT

GENERAL INFORMATION

Permit Number: VAR04114	Report Date:
Reporting Period: to	

TOTAL NUMBER OF PROJECTS WITH NO LAND DISTURBING ACTIVITIES

Installation	**Number of Projects with no Land Disturbing Activities during reporting period**
Naval Station Norfolk	
Naval Support Activity, Hampton Roads (excluding NSA Northwest)	
Joint Expeditionary Base, Little Creek	
Joint Expeditionary Base, Fort Story	
Naval Air Station Oceana	
Dam Neck Annex	
Naval Medical Center Portsmouth	
Scott Center Annex	
Total	

TOTAL NUMBER OF SITE VISITS CONDUCTED TO PROJECTS WITH NO ACTIVE LAND DISTURBING ACTIVITIES

Installation	**Total Number of Site Visits**
Naval Station Norfolk	
Naval Support Activity, Hampton Roads (excluding NSA Northwest)	
Joint Expeditionary Base, Little Creek	
Joint Expeditionary Base, Fort Story	
Naval Air Station Oceana	
Dam Neck Annex	
Naval Medical Center Portsmouth	
Scott Center Annex	
Total	

Attachment 18
Erosion and Sediment Control Status Report Form for Installations Not Covered under the MS4 Permit

NAVFAC Mid-Atlantic / Environmental Compliance
1510 Gilbert St., Bldg. N-26
Norfolk, VA 23511

EROSION AND SEDIMENT CONTROL STATUS REPORT
INSTALLATIONS NOT COVERED UNDER THE MS4 PERMIT

GENERAL INFORMATION

Reporting Period: to	Report Date:

TOTAL NUMBER OF REGULATED LAND DISTURBING ACTIVITIES

Installation	**Number of Land Disturbing Activities during reporting period**
Defense Fuel Support Center Craney Island	
Naval Weapons Station Yorktown	
Naval Weapons Station Yorktown, Cheatham Annex	
Defense Fuel Support Center Yorktown	
Naval Auxiliary Landing Field Fentress	
Norfolk Naval Shipyard Saint Julien's Creek Annex	
Norfolk Naval Shipyard St. Helena	
Southgate Annex	
Naval Support Activity, Hampton Roads Northwest Annex	
Total	

TOTAL NUMBER OF ACRES DISTURBED

Installation	**Number of Acres Disturbed**
Defense Fuel Support Center Craney Island	
Naval Weapons Station Yorktown	
Naval Weapons Station Yorktown, Cheatham Annex	
Defense Fuel Support Center Yorktown	
Naval Auxiliary Landing Field Fentress	
Norfolk Naval Shipyard Saint Julien's Creek Annex	
Norfolk Naval Shipyard St. Helena	
Southgate Annex	
Naval Support Activity, Hampton Roads Northwest Annex	
Total	

TOTAL NUMBER OF INSPECTIONS CONDUCTED

Installation	**Initial Inspections**	**Monthly Inspections**	**Project Completion**	**Total per Installation**
Defense Fuel Support Center Craney Island				
Naval Weapons Station Yorktown				
Naval Weapons Station Yorktown, Cheatham Annex				
Defense Fuel Support Center Yorktown				
Naval Auxiliary Landing Field Fentress				
Norfolk Naval Shipyard Saint Julien's Creek Annex				
Norfolk Naval Shipyard St. Helena				
Southgate Annex				
Naval Support Activity, Hampton Roads Northwest Annex				
Total				

SUMMARY OF DEFICIENCIES PER INSTALLATION

Installation: **Defense Fuel Support Center Craney Island**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Weapons Station Yorktown**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Weapons Station Yorktown, Cheatham Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Defense Fuel Support Center Yorktown**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Auxiliary Landing Field Fentress**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Norfolk Naval Shipyard Saint Julien's Creek Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Norfolk Naval Shipyard St. Helena**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Southgate Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Installation: **Naval Support Activity, Hampton Roads Northwest Annex**		
Number of Initial Deficiencies:	Number of Repeat Deficiencies:	Number of Immediate Threats:
Summary of Inspection Reports with Deficiencies		
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)
Project:	Date:	Type of Action: (Initial Deficiency, Repeat Deficiency, OR Immediate Threat)

Appendix I – Good Housekeeping Policies and Procedures

Good Housekeeping Policies and Procedures for Municipal Operations
Commander, Navy Region Mid-Atlantic

Introduction and Organization of Procedures Document

This document presents the good housekeeping policies and procedures for municipal operations covered under NAVFAC Mid-Atlantic's Regional MS4 Program Plan. The document includes the following sections:

- Overview of Permit Requirements
- Objective of Procedures
- Application of Procedures
- NAVFAC Mid-Atlantic Policies (illegal discharges and illegal dumping; construction site runoff control; post construction runoff management; and spill reporting and documentation)
- Site Investigations and Inspections (industrial permit; and municipal SWPPPs)
- Daily Operations Procedures (vehicle and associated equipment washing; vehicle fueling; storage areas; vehicle and equipment storage areas; recycle facilities and storage; road, street, and parking lot maintenance; landscaping; construction activities; and storm drain/utility line maintenance)
- Equipment Maintenance Procedures (vehicle maintenance and storage)
- Pesticide, Herbicide, and Fertilizer Procedures (application; storage; transport; disposal; and nutrient management plans)
- Miscellaneous (inspections; general spill and discharge response procedures; general dewatering; training; and contractor requirements/oversight)

In addition to detailing the appropriate policies and procedures for good housekeeping, Attachment includes an illustration of best management practices (BMPs) developed by Commander, Navy Region Mid-Atlantic (CNRMA).

Overview of Permit Requirements

The following Good Housekeeping Procedures have been developed in accordance with Section II.B.6.a through g of the Virginia Department of Environmental Quality's (DEQ) Phase II General Permit No. VAR040114 (page 20 of 31) as excerpted in portions below. Note that not all of the procedures below will be applicable to all installations since the same activities are not conducted at all of the installations.

a. ***Operations and Maintenance Activities.*** *The MS4 Program Plan submitted with the registration statement shall be implemented by the operator until updated in accordance with this state permit. In accordance with Table 1 of this section, the operator shall develop and implement written procedures designed to minimize or prevent pollutant discharge from: (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage and transport and disposal of*

pesticides, herbicides and fertilizers. The written procedures shall be utilized as part of the employee training. At a minimum, the procedures shall be designed to:

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

(Note that these procedures are discussed throughout this document.)

b. ***Municipal facility pollution prevention and good housekeeping.*** *(Note that this has been addressed under Contract Number N62470-D-10-3000; WE28 and municipal SWPPPs have been submitted under separate cover to address BMP 6.2, High-Priority Facilities and SWPPPs in the Regional MS4 Program Plan.)*

c. ***Turf and Landscape Management.*** *(Note that this has been addressed under Contract Number N62470-D-10-3000; WE28 and Nutrient Management Plans have been submitted under separate cover to address BMP 6.3, Turf and Landscape Nutrient Management in the Regional MS4 Program Plan.)*

d. ***Training.*** *The operator shall conduct training for employees. (Note that there are additional specific requirements in the permit and these are discussed later in this document. Also note that this document does not address the training plan requirements of BMP 6.4 in the Regional MS4 Program Plan.*)

e. *The operator shall require that municipal contractors use appropriate controls measures and procedures for stormwater discharges to the MS4 system. Oversight procedures shall be described in the MS4 Program Plan. (Note that this requirement is discussed later in this document.)*

f. *At a minimum, the MS4 Program Plan shall contain:*

   (1) The written protocols being used to satisfy the daily operations and maintenance requirements;

(2) A list of all municipal high priority facilities that identifies those that have a high potential for chemicals or other materials to be discharged in stormwater and a schedule that identifies the year in which an individual SWPPP will be developed for those facilities required to have a SWPPP.

(Note that these requirements are associated with BMP 6.1 [addressed in this document] and BMP 6.2, High-Priority Facilities and SWPPPs in the Regional MS4 Program Plan [addressed by a different task order under separate cover]).

Objective of Procedures

The objective of the procedures is to comply with the permit requirements (described above) by addressing BMP 6.1, Written Policies and Procedures included in the Regional MS4 Program Plan. In addition, this document briefly discusses associated training requirements (BMP 6.4) but does not address the training plan requirements of this BMP. As previously noted, BMP 6.2 (High-Priority Facilities and SWPPPs) and BMP 6.3 (Turf and Landscape Nutrient Management) are addressed by a separate delivery order and submitted under separate cover. The only remaining BMP under MCM #6 for Pollution Prevention and Good Housekeeping is BMP 6.5 which addresses tracking and reporting of the BMP implementation status in the annual report.

It is the responsibility of the MS4 Permit Manager to effectively communicate these procedures to the appropriate staff and ensure that the procedures are followed by Navy employees as well as contractors.

Application of Procedures

These procedures apply to the installations covered by the Regional MS4 permit including:

- Naval Station Norfolk (excluding Craney Island) (NSN)
- Naval Support Activity, Hampton Roads (excluding NSA Northwest) (NSA HR)
- Joint Expeditionary Base, Little Creek (JEB LC)
- Joint Expeditionary Base, Fort Story (JEB FS)
- Naval Air Station Oceana (NASO)
- Dam Neck Annex (NASO DN)
- NSA Hampton Roads Portsmouth Annex (Portsmouth Annex)
- Scott Center Annex (SCA)

NAVFAC Mid-Atlantic Policies

This section discusses the NAVFAC Mid-Atlantic's current policies including illegal discharges and illegal dumping; construction site runoff control; post construction runoff management, and spill reporting and documentation.

Illegal Discharges and Illegal Dumping

CNRMA has developed Draft Standard Operating Procedures (SOPs) with the purpose of preventing illegal discharge and illegal dumping into the storm drainage systems. The draft SOPs require that periodic inspections occur to detect illicit connections, discharges, and dumping.

Construction Site Runoff Control

CNRMA has two sets of draft instructions related to construction site runoff control. The first, entitled "COMNAVREG MIDLANT Virginia Stormwater Management Program Construction Permit Instruction," establishes a procedure for obtaining coverage under the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities at installations and annexes and applies to projects with a disturbance of one acre or greater. The second set of instructions, entitled "COMNAVREG MIDLANT Erosion and Sediment Control Instruction," establishes minimum standards for the effective control of soil erosion, sediment deposition, and non-agricultural runoff from land-disturbing activities at installations and applies to projects with a disturbance of 10,000 square feet or greater.

Post Construction Runoff Management

CNRMA has developed a draft set of instructions related to post-construction site runoff control, entitled "COMNAVREG MIDLANT Post Construction Stormwater Runoff Management Instruction." These instructions require minimum post-construction BMPs at installations and annexes. The instruction applies to all development and redevelopment activities greater than or equal to one acre in size. The instruction also applies to land development activities for an area smaller than one acre, if the activities are part of a larger common plan of development.

Spill Reporting and Documentation

NAVFAC Mid-Atlantic has implemented the "Hampton Roads Naval Installation Spill Reporting and Documentation Standard Operating Procedures," which outlines reporting and documentation actions that must be taken in response to a spill/release of oil, sewage, or hazardous or non-hazardous substance (solid or liquid). In accordance with the Spill Reporting and Documentation SOP, spills are reported to the Virginia DEQ and the Virginia Department of Conservation and Recreation (DCR). Spill reporting includes both an initial report of the spill within 24 hours of the spill discovery and a 5-day spill letter, which documents specific details of the spill. The 5-day spill letter includes:

- Date of release/discovery;
- Time of release/discovery;
- Location;
- Substance released;
- NRC # (if applicable);
- Quantity released;
- Quantity recovered;
- Receiving waterway;
- Cause of release; and
- Cleanup actions taken.

Site Investigations and Inspections

This section discusses the site investigation and inspection requirements under the Industrial and Municipal SWPPPs per their respective permits.

Industrial Permit

Many of the installations covered under the MS4 Permit are also covered under the Virginia DEQ Industrial Stormwater Permit. As a result, updates to the Industrial SWPPP, Site Compliance Evaluations (SCEs), and Illicit Discharge Surveys are completed on a regular (annual or other) basis. The SCEs are comprehensive surveys that closely examine the potential for pollutants associated with industrial activities to be conveyed into the storm drain system. The SWPPP reports identify potential pollutants and include recommendations of BMPs to be implemented with corresponding priority categorization (low, medium, or high). Certain industrial facilities (e.g., Transportation Facilities) must be inspected quarterly to ensure that areas related to the operation of that facility are implementing the necessary BMPs.

Municipal Stormwater Pollution Prevention Plans

In addition, Section II.B.6.b (3) of the MS4 Permit requires the development of municipal SWPPPs. As of July 2015, NAVFAC Mid-Atlantic has developed 13 Final SWPPP reports for locations that were identified as high-priority facilities.

1. Dam Neck Annex – Group 1 of 2 (Building 372)
2. Dam Neck Annex – Group 2 of 2 (Buildings 552, 553, 585B, 613)
3. Joint Expeditionary Base (JEB) Little Creek – Group 1 of 2 (Buildings 3107, 3165, 3292, 3293, 3653, 3661, 3664)
4. JEB Little Creek – Group 2 of 2 (Buildings 3895, 3903)
5. Naval Air Station (NAS) Oceana – Group 1 of 2 (Buildings 721, 820)
6. NAS Oceana – Group 2 of 2 (Buildings 3034, 3035)
7. Portsmouth Annex – Group 1 of 4 (Building 107)
8. Portsmouth Annex – Group 2 of 4 (Building 273)
9. Portsmouth Annex – Group 3 of 4 (Building 277)
10. Portsmouth Annex – Group 4 of 4 (Building 289)
11. Naval Support Activity (NSA) Hampton Roads – Group 1 of 1 (Building SC-401)
12. Naval Station Norfolk – Group 1 of 2 (Building LP-131[A-D])
13. Naval Station Norfolk – Group 2 of 2 (Building NM-37)

Daily Operations Procedures

This section provides good housekeeping procedures for vehicle and associated equipment washing; vehicle fueling; storage areas; vehicle and equipment storage areas; recycle facilities and storage; road, street, and parking lot maintenance; landscaping; construction activities; and storm drain/utility line maintenance.

Vehicle and Associated Equipment Washing

Government-owned as well as private vehicles and equipment are washed as needed at designated wash racks equipped with an oil water separator (OWS) and/or a diversion valve to direct flow to the sanitary sewer and prevent non-permitted discharges.

The below Good Housekeeping Procedures should be followed:

- Perform cleaning operations only within designated areas
- Ensure all personnel are properly trained on wash rack operational procedures and use appropriate signage to reinforce training
- Utilize automatic shutoff valves as appropriate to prevent polluted wash waters from entering the storm drain system
- Perform cleaning operations indoors where practicable
- Provide cover over the cleaning operation where practicable
- Ensure all wash waters drain to the appropriate collection system and the system is clear, operational, and properly functioning. The appropriate collection system will either be the sanitary system if full treatment is needed or the storm drain system with pretreatment (as appropriate) if minor treatment is needed. Otherwise, the wash waters should be directed to a grassy area to encourage infiltration into the ground.
- Treat and/or recycle the collected stormwater runoff were practicable

Vehicle Fueling

During motor vehicle and equipment fueling, fuel products are transferred from bulk fueling sites, mobile refuelers, underground storage tanks (USTs), or aboveground storage tanks (ASTs) to the serviced vehicle or equipment. Activities associated with fueling include delivery and transfer, storage, and dispensing. In areas with high risk associated with large quantities of fueling activities such as large fuel tanks, NAVFAC Mid-Atlantic has developed detailed prevention and response procedures in SPCC Plans.

To prevent or reduce accidental spills and overfills, leak detection systems and overfill alarms are installed on all USTs. ASTs have liquid level gauges, overflow alarms, and are typically located within secondary containment or have an environmental equivalent.

The below Good Housekeeping Procedures should be followed:

- Conduct fuel transfer operations only within designated areas
- Provide cover over the fueling area to prevent contact with stormwater
- Maintain and utilize overflow protection; e.g., spill buckets, high-level alarms, automatic tank gauges (ATGs), etc. as appropriate
- Maintain and utilize appropriate spill cleanup equipment; i.e., spill kits
- Minimize run-on/runoff of stormwater to the fueling area
- Utilize dry cleanup methods
- Treat and/or recycle collected stormwater runoff where practicable

- Avoid topping off fuel tanks
- Divert runoff from fueling areas
- Utilize automatic shutoff valves as appropriate
- Provide secondary containment for fuel storage and transfer operations

Storage Areas

Storage areas require regular maintenance to ensure that they stay in a clean and orderly state. It is important to limit or minimize the amount of exposure the bulk materials have to stormwater in order to prevent the suspension and transportation of the materials into the storm drain system.

All bulk storage piles of salt or piles containing salt used for deicing or other purposes are enclosed or covered to prevent exposure to precipitation. All salt storage piles are located on an impervious surface and runoff is collected and contained, maintained in storage tank(s), or disposed of through a sanitary system. Salt-contaminated stormwater is not permitted to be discharged into the stormwater system.

The below Good Housekeeping Procedures should be followed:

- Maintain storage vessels in good condition with proper labeling
- Complete inventories of stored materials to track/monitor
- Provide indoor storage for materials, where practicable
- If indoor storage is not practicable, provide storm-resistant cover (tarp or outdoor shed) for material storage
- Install berms or dikes to minimize run-on/runoff of stormwater to these areas
- Use dry cleanup methods
- Treat and/or recycle collected stormwater runoff where practicable
- Confine loading/unloading activities to a designated area outside drainage pathways and away from surface waters
- Load/unload indoors or in designated covered areas
- Close/cover storm drains during loading/unloading activities in surrounding areas
- Install barriers around catch basins and storm drain inlets to prevent wet or dry material from entering the storm drain system (Note: Select the barrier type based on the pollutant with the highest probability of entering the system. For example, some barriers are best for preventing sediments from entering the system while others are better for oily materials.)
- Utilize drip pans, berms, dikes, absorbent materials, roofs, or covered storage areas to minimize contamination of the stormwater runoff from these areas
- Keep flammable and hazardous materials in designated storage cabinets and lockers
- Provide secondary containment, as appropriate
- Install diversion berms or grassed swales and disconnect storm/roof drains to minimize run-on/runoff of stormwater to these areas
- Enclose or cover salt storage piles or piles containing salt
- Store salt piles on an impervious surface

Vehicle and Equipment Storage Areas

There are several locations where vehicles and/or parts, such as batteries, belts, hoses, tires, and other materials, are stored outdoors. At these locations, precautions should be taken to ensure that leaks from the vehicles and equipment do not occur.

The below Good Housekeeping Procedures should be followed:

- Confine storage of vehicles and equipment awaiting maintenance to designated areas that are under cover to prevent contact with stormwater
- Store vehicles and equipment indoors where practicable
- Utilize drip pans, berms, dikes, absorbent materials, roofs, or covered storage areas to minimize contamination of the stormwater runoff from these areas
- Install barriers around catch basins and storm drain inlets to prevent wet or dry material from entering the storm drain system (Note: Select the barrier type based on the pollutant with the highest probability of entering the system. For example, some barriers are best for preventing sediments from entering the system while others are better for oily materials.)
- Maintain and utilize appropriate spill cleanup equipment; i.e., spill kits
- Clean pavement surface to remove oil and grease but prevent the oil and grease from entering the storm drain system
- Cover storage areas with roofs or tarps
- Confine storage of equipment to designated area away from high traffic, drainage patterns, and surface waters
- Install diversion berms or grassed swales and disconnect storm/roof drains to minimize run-on/runoff of stormwater to these areas
- Ensure that all containers are properly labeled and sealed
- Complete inventories of stored materials to track/monitor
- Keep flammable and hazardous materials in designated storage cabinets and lockers
- Provide secondary containment, as appropriate

Recycle Facilities and Storage

Many of the installations have active recycling programs and facilities. In general, recycled materials include glass, plastic, cardboard, metals, paper, and other goods. A recyclable material inspection program minimizes the likelihood of receiving materials that may be significant pollutant sources to stormwater discharges. At the recycling center yard at JEB Little Creek, a containment boom (floating barrier) is used to prevent spill and other pollution sources from entering open water courses.

The below Good Housekeeping Procedures should be followed:

- Develop information and education measures to inform suppliers of recyclable materials about the types of materials that are acceptable and those that are not recyclable
- Provide training measures for drivers responsible for pickup of recyclable materials

- Reject non-recyclable wastes or household hazardous waste at the source
- Develop procedures for handling and disposing of non-recyclable materials
- Provide totally enclosed or covered drop-off containers for the public
- Install a sump pump with each containment pit and discharge collected fluids to a sanitary sewer
- Provide dikes and curbs for secondary containment
- Divert surface runoff away from outside material storage areas
- Provide covers over containment bins, dumpsters, and roll-off boxes
- Store the equivalent of one day's volume of recyclable materials indoors
- Schedule routine good housekeeping measures for all storage and processing areas

Road, Street, and Parking Lot Maintenance

In general, road, street, and parking lot maintenance is managed by the individual facility managers at each installation. After a need for maintenance is documented, the facility manager may contract the work out or send it to an internal department (such as engineering, utilities, public works shops, etc.) depending upon the nature of the maintenance needed.

The below Good Housekeeping Procedures should be followed:

- Prevent paving materials and wastes from entering the storm drain system by closing the storm drain inlets or by installing barriers around catch basins and storm drain inlets to prevent wet or dry material from entering the storm drain system (Note: Select the barrier type based on the pollutant with the highest probability of entering the system. For example, some barriers are best for preventing sediments from entering the system while others are better for oily materials.)
- Minimize the exposure of soils or graded areas to stormwater runoff
- Store materials (sand, gravel, etc.) away from storm drains and cover materials to prevent erosion
- Collect and properly dispose of any sand, gravel, asphalt, or other material as soon as possible
- When spreading aggregate, limit to the sealed surface and sweep up or vacuum excess aggregate once cured
- Mix road stabilization materials during periods of dry weather and seal as soon as possible
- Fill and compact the paving materials (soil, gravel and asphalt) in layers
- Fully seal road shoulders to prevent "edge break"
- Use water-based paints or thermoplastics for striping instead of solvent-based paints
- Do not use coal tar-based sealants for repairing pavement cracks
- Use portable drip trays under equipment to catch leaks and spills
- For any maintenance activities that would result in materials being sprayed away from the work site (such as blasting), prevent the dispersion of materials with the use of a skirt or other type of cover.

- For winter time operations, use barriers or other methods to capture or divert deicing materials from entering the storm drain system
- Reduce salt usage by using anti-icing agents such as beet juice and consider using acetate based deicers

Landscaping

In general, landscaping is managed by the individual facility managers at each installation. After a need for landscaping is documented, the facility manager may contract the work out or complete it internally.

The below Good Housekeeping Procedures should be followed:

- Store landscaping equipment in designated areas
- Use drip pans and/or inspect landscaping equipment for leaks daily
- Store all materials, chemicals, and fertilizers in designated areas, preferably indoors or within a covered area
- Conduct all fuel transfers only within designated areas outside drainage pathways, away from surface waters, and with appropriate containment or environmental equivalent
- Wash/clean all landscaping equipment at wash racks or approved designated areas
- Maintain and utilize appropriate spill cleanup equipment; i.e., spill kits
- Use dry cleanup methods
- Confine loading/unloading activities to a designated area outside drainage pathways and away from surface waters
- Load/unload indoors or in covered areas
- Dispose of the landscape waste (grass clippings, leaves, dead plants, etc.) in a proper manner
- Close/cover storm drains during maintenance activities
- Sweep or blow any grass clippings away from paved areas after mowing
- Employ erosion control measures when soils are exposed
- Place stockpiled materials away from storm drains
- Properly dispose of collected landscape materials (grass clippings, etc.)
- Do not use leaf blowers to direct waste into streets, storm drains, or ditches
- Employ devices to prevent irrigation after precipitation or if there is a break in the sprinkler head or water line
- Refer to the Nutrient Management Plans section of this document for additional information on fertilization recommendations to prevent excess nitrogen and phosphorus in stormwater runoff

Construction Activities

In general, construction activities (building demolition, new building construction, utility relocation, etc.) are completed by independent contractors at the installations. Training is provided to all contractors regarding the proper maintenance procedures to prevent the pollution of stormwater.

The below Good Housekeeping Procedures should be followed:

- Use common sense
- Use dry cleanup methods
- Situate maintenance, storage, and disposal areas as far away from rainfall and runoff areas as possible
- Cover materials when not in use and before rain events
- Use drip pans and/or inspect construction vehicles for leaks daily
- Utilize appropriate structures to control/minimize erosion and runoff; e.g., diversionary structures, traps, basins, conveyances, etc.
- Filter contaminated runoff using sediment control techniques such as a silt fence
- Keep equipment in good working order
- Create impervious berms around maintenance and wash areas
- Dispose of waste in the proper receptacle or area
- Ensure dumpster lids are closed and containers have watertight lids
- Store waste materials on pallets and not directly on the ground
- Dispose of waste material and wastewater properly and not into the storm drain system
- For sites that require dewatering, do not dispose of the waste water directly into the storm drain system (use filter bags and apply to grassy areas)

Storm Drain/Utility Line Maintenance

Since fine particles and debris (and associated pollutants) tend to accumulate along the curbs of roads, rain events typically wash these pollutants into the storm drain system. Although regular maintenance of the storm drain and other utility systems would be a good practice to improve water quality, prevent clogging, and prevent flooding, it is typically not economically feasible to do more than reactive maintenance in response to problems.

Typical methods for catch basin and inlet cleaning include manual cleaning, eductor cleaning, vacuum cleaning, and vacuum combination jet cleaning (e.g. Vaccon). The primary goal of the cleaning is to collect and separate out the sediment and debris from water so that the pollutants and the water can be disposed of properly (in the sanitary system, the storm drain system with pretreatment as needed, or in a grassy area to encourage infiltration into the ground).

Manual cleaning is commonly completed by either bailing out the sediment-laden water and then shoveling the sediment into a disposal truck, or by entering the catch basin and filling buckets with sediment and depositing the sediment in the disposal truck. Eductor cleaning removes the sediment-laden water from the catchment and separates the pollutants from the water with the use of a settling tank. Vacuum cleaning utilizes an air blower of a vacuum truck to collect the air-solid-liquid material from the catchment and separate them out by gravity separation and baffles. In some cases, the vacuum suction is not strong enough to extract materials from the storm inlets and a vacuum combination jet cleaning system is used. In this system, the vacuum uses hydraulic suction to collect the debris from the inlets or storm drains. Then a water jet is used to dislodge any remaining materials.

General Good Housekeeping Procedures for storm drain/utility maintenance/cleanout include:

- For storm drains and electrical manholes, decant any liquids containing sediments/debris to remove as much of the sediment as possible; the sediments should be disposed of in a landfill and the remaining water should be disposed of properly (either in the sanitary system, the storm drain system with pretreatment as needed or in a grassy area to encourage infiltration into the ground)
- For sanitary sewer lines and manholes, material may not be discharged to storm drains or grassy areas, it must be disposed of via the sanitary sewer or as a solid waste
- When testing fire protection system and fire hydrants or flushing water lines, care should be taken not to cause erosion and discharges. To accomplish this, discharges should be routed through a diffuser so that the flow can be directed away from erodible areas and storm drains. For areas that are being flushed on a routine/regular basis, a storm drain filter sock may be used as appropriate.
- Clean out the storm drains when the catch basin storage is one-third full
- Optional:
  - Track the amount of sediment and debris in different areas to allow the analysis of trends
  - Analyze the collected waste to assess the proper disposal method

Equipment Maintenance Procedures

This section provides good housekeeping procedures for vehicle maintenance and storage.

Vehicle Maintenance and Storage

Preventative maintenance and general repair services on automobiles, vans, trucks, forklifts, mobile refuelers, and emergency vehicles are performed at various maintenance facilities. Related activities may include fluid changes, mechanical repairs, parts cleaning and replacement, sanding, refinishing, painting, and vehicle and equipment storage. These facilities may also store used parts, such as batteries, belts, hoses, tires, and other materials. Additionally, used/waste liquid storage may be onsite, including petroleum/oil/lubricants (POLs), fuel, antifreeze, cleaners, and solvents.

Most vehicle maintenance activities occur indoors and therefore are usually not exposed to stormwater runoff. Spills may occur within these buildings during repair activities as a result of leaking, ruptured, and overturned containers, or leaking vehicles and associated equipment. Therefore, these facilities have spill response procedures and spill kits readily available.

The below Good Housekeeping Procedures should be followed:

- Store equipment awaiting maintenance in designated areas, preferably indoors or under the cover of an outdoor storage shed or tarp
- Store equipment indoors, where practicable
- Perform maintenance activities indoors, where practicable

- Conduct periodic inspections of stored equipment for leaks
- Utilize appropriate overflow protection; e.g., spill buckets, high-level alarms, ATGs, etc.
- Maintain and utilize appropriate spill cleanup equipment; i.e., spill kits
- Utilize dry cleanup methods
- Utilize drip pans
- Provide secondary containment for hazardous materials and POLs
- Maintain an organized inventory of materials used in the shop
- Store lubricants and hydraulic fluids indoors
- Keep flammable and hazardous materials in designated storage cabinets and lockers
- Drain all parts of fluids prior to disposal
- Prohibit wet cleanup practices that would result in the discharge of pollutants to the stormwater drainage system
- Employ emergency shut off valves as appropriate
- Treat and/or recycle the collected stormwater runoff where practicable
- Minimize the run-on/runoff of stormwater to the maintenance areas by disconnecting storm/roof drains
- Wash/clean vehicles and equipment only in designated areas/ wash racks
- Prohibit vehicle and equipment wash water from discharging to the storm sewer system
- Provide employee training on proper handling and storage of hydraulic fluids and lubricants through the use of the ECATTS online training program

Pesticide, Herbicide, and Fertilizer Procedures

This section provides good housekeeping procedures for pesticide, herbicide, and fertilizer application, storage, transport, and disposal. It also discusses turf and landscape nutrient management plans.

Application

Fertilizers, pesticides, and herbicides are applied routinely to various locations throughout the installations. Pest-control activities are performed by the appropriately licensed personnel from NAVFAC Mid-Atlantic Pest Control staff and appropriately licensed independent contractors. Typical pesticide application consists of fogging for mosquitoes using Vectorbac-G, as well as small, isolated use of other insecticides as needed. Fogging is performed several days per week throughout peak season during four to five weeks of summer. Herbicide is applied in various areas to control or eliminate unwanted plant growth. Various chemicals (e.g., Turflon®, glyphosate, Weedar 64®, etc.) are used as herbicides. Employees and contractors who apply pesticides and herbicides are properly trained or certified in accordance with the Virginia Pesticide Control Act.

The below Good Housekeeping Procedures should be followed:

- Apply in accordance with the manufacturer's instructions
- Do not spray pesticides/herbicides outdoors on windy or rainy days
- Take precautions keep the pesticide/herbicide/fertilizer away from the storm drain system and open waterways

Storage

In general, fertilizers, pesticides, and herbicides are stored indoors or under cover and are usually not exposed to stormwater runoff. Pesticides are mixed under cover at certain buildings at the installations.

The below Good Housekeeping Procedures should be followed:

- Store indoors or inside locked storage cabinets located under cover
- Station appropriately stocked spill kits nearby
- Maintain good condition of all storage containers
- Store pesticide/herbicide liquid within a berm

Transport

Accidents can happen even when transporting fertilizers, pesticides, or herbicides on a short trip. Improperly loaded containers can become damaged during transit and cause potential adverse impact to the environment as well as human health.

The below Good Housekeeping Techniques should be followed:

- Appropriately identify and label all containers
- Check the Material Safety Data Sheet (MSDS) for shipping and transport information
- Inspect all containers before loading for transport
- Handle the containers carefully, do not drop or toss them
- Remove anything in the cargo area that could damage or puncture the containers
- Secure all containers to prevent load shifts
- Keep an appropriately stocked spill kit in the vehicle at all times
- Drive safely

Disposal

If there is only a small excess of pesticide, herbicide, or fertilizer, the best way to dispose of it is to apply it to a specific site as designated by the label. If a larger amount remains, it should be disposed of through a household hazardous waste program. If the material is designated as hazardous under the Resource Conservation and Recovery Act (RCRA), then the individual transporting of the waste must be properly permitted and the waste must be properly manifested.

Nutrient Management Plans

Section II.B.6.c requires that turf and landscape nutrient management plans be developed by a certified turf and landscape nutrient management planner where nutrients are applied to a contiguous area greater than one acre. As of July 2015, NAVFAC Mid-Atlantic has developed four draft turf and landscape nutrient management plans:

1. Eagle Haven Golf Course, JEB Little Creek
2. The Hornet at Aeropines Golf Club, NAS Oceana
3. The Tomcat at Aeropines Golf Club, NAS Oceana
4. Sewell's Point Golf Course, NSA Hampton Roads

The purpose of these plans is to ensure the minimum movement of nitrogen and phosphorus from the specified area of application to surface and ground water, where they can potentially have a detrimental effect on water quality. These plans provide the guidelines for fertilization practices for the golf courses with the intent of eliminating/limiting the amount of fertilizer that is conveyed into the adjacent receiving waters.

Miscellaneous

The below addresses miscellaneous items (inspections, general spill and discharge response procedures, general dewatering procedures, training, and contractor requirements/oversight) which may apply to one or more of the activities described above.

Inspections

Inspections should be completed on a regular basis at sites with potential for stormwater pollution to ensure that the good housekeeping procedures are being followed. Refer to the Site Investigations and Inspections section of this document which was presented earlier for more detail.

General Spill and Discharge Response Procedures

In areas with high risk associated with spills such as large fuel tanks, NAVFAC Mid-Atlantic has developed detailed prevention and response procedures in SPCC Plans. The procedures listed below should apply to all other areas with less risk:

- Install barriers around catch basins and storm drain inlets to prevent wet or dry spilled material from entering the storm drain system (Note: Select the barrier type based on the pollutant with the highest probability of entering the system. For example, some barriers are best for preventing sediments from entering the system while others are better for oily materials.)

- Use rags or absorbent materials (such as kitty litter) to soak up small quantities of non-hazardous liquids then promptly and properly dispose of the rags and absorbent materials
- Use absorbents, gels, or foams to clean up larger quantities of non-hazardous materials
- Use brooms and/or shovels to clean up and properly dispose of dry materials and any equipment used to the clean up the spill as appropriate
- If water is used to assist in the cleanup of spills, it must be collected and disposed of properly; depending upon the material that is being cleaned up, the wash water should either be directed to treatment (the sanitary system or storm system with pretreatment) or to a grassy area to encourage infiltration
- For spills of hazardous material or of large quantities of non-hazardous material, contact the spill response coordinator at the respective installation; note that hazardous materials and materials used to clean up hazardous material have special disposal requirements

In addition and as previously mentioned in this document, NAVFAC Mid-Atlantic follows the "Hampton Roads Naval Installation Spill Reporting and Documentation Standard Operating Procedures" for reporting and documenting spills.

General Dewatering

The general process of dewatering occurs with many daily operational procedures such as road and street maintenance; various construction activities; and equipment maintenance procedures. Typically, vacuum-type equipment is used to suction the water (which may contain sediments and/or other pollutants) into a storage tank or other container. Depending upon the expected pollutants in the water, it should be either directed to treatment (the sanitary or storm drain system with pretreatment) or to a grassy area to encourage infiltration.

Training

NAVFAC Mid-Atlantic uses the web-based ECATTS to train employees and independent contractors on several topics including pollution prevention and good housekeeping. ECATTS is accessible from any computer with internet access. It was developed to provide environmental compliance information and training to users who need an understanding of environmental laws, regulations, and policies to successfully complete their jobs. Also, the training modules are offered on a continuous basis and the number of people trained on each module is recorded.

Several ECATTS stormwater training modules have been developed, including:

- Principals of Erosion and Sedimentation
- Erosion and Sediment Control Practices
- Vegetative Stabilization
- Stormwater Runoff
- Stormwater BMPs

- Construction Site Pollution Prevention
- Sediment and Stormwater Plans

Good housekeeping and pollution prevention practices training emphasize procedures that are currently used to minimize stormwater pollution, and stress additional practices that may improve good housekeeping. The following items are emphasized during training:

- Non-permitted discharges into the stormwater drainage system are illegal and could potentially result in monetary penalties and criminal prosecution
- All spilled materials will be promptly cleaned up and disposed of properly
- Spill kits must be stationed near areas with high spill potentials
- A regular schedule for housekeeping activities will be developed and implemented that includes specific personnel assignments and responsibilities

Additionally, specialized training shall be provided to ensure the following:

- Employees and contractors who apply pesticides and herbicides are properly trained or certified in accordance with the Virginia Pesticide Control Act
- Employees and contractors obtain certifications required by the Virginia Erosion and Sediment Control Law and all associated regulations (to include those serving as plan reviewers, inspectors, program administrators, and construction site operators)
- Appropriate emergency response employees having spill response training, with a summary of the training and certification program included in the first annual MS4 report

To facilitate successful personnel training, problem areas will be identified and training sessions will be conducted to stimulate employee feedback. Currently, stormwater training is conducted as necessary depending upon the responsibilities of the personnel.

Contractor Requirements/Oversight

The Good Housekeeping Procedures outlined in this document should be incorporated into the legal contracts, as appropriate, to ensure that these procedures are followed. In addition, it is the responsibility of the manager of the various contractor's to ensure that the procedures are followed.

ATTACHMENT

CNRMA Stormwater Best Management Practices Poster

STORMWATER

BEST MANAGEMENT PRACTICES

CLEAN UP SPILLS WITH SORBENTS

CONDUCT INSPECTIONS

STORE CHEMICALS INDOORS & UNDER COVER

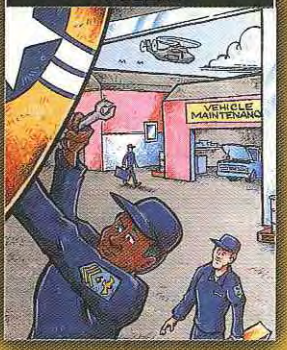
KEEP LIDS CLOSED

ASSURE PROPER VALVE OPERATION

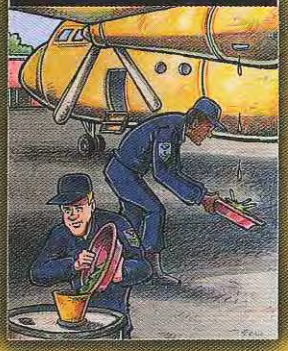
DRY SWEEP; DO NOT HOSE TO STORM DRAINS

STORE WASTES ON SPILL PALLETS

CONDUCT MAINTENANCE INDOORS



USE DRIP PANS



DO NOT OVERFILL TANKS OR DRUMS

LEADERSHIP · VISION · TEAMWORK · SERVICE

NAVY REGION · MID-ATLANTIC · COMMANDER

NLL Number: 0525LP1014132

Appendix J – High Priority MS4 Facilities

Summary of MS4 Regulated Buildings and Associated High Priority Municipal Activities

Installation	Building	Outfall(s)	Municipal Activity	Building/Facility Description
Naval Station Norfolk	NM-37	301	Vehicle Storage and Maintenance Yards	Ordinance Support Equipment
Naval Station Norfolk	LP-131	115	Pesticide Storage Facilities	Pesticide Mixing Shop and Storage Facility
NSA Hampton Roads	SC-401	613	Equipment Storage and Maintenance Facilities, Material Storage Yards	Public Works Shop Supply Warehouse
JEB Little Creek	3107	760	Public Works Yard	Public Works Shop
JEB Little Creek	3165	760	Public Works Yard	Public Works Shop
JEB Little Creek	3292	760	Public Works Yard	Public Works Shop
JEB Little Creek	3293	760	Public Works Yard	Public Works Maintenance Shop
JEB Little Creek	3653	760	Equipment Storage and Maintenance Facilities, Material Storage Yards	Public Works Maintenance Shop
JEB Little Creek	3661	760, SF-025	Material Storage Yards, Recycling Facilities, Vehicle Storage and Maintenance Yards	Recycling Facility
JEB Little Creek	3664	760, SF-025	Public Works Yards	Public Works Expendable/Work in Process
JEB Little Creek	3895	766	Equipment Storage and Maintenance Facilities	Public Works Maintenance/Storage
JEB Little Creek	3903	766	Equipment Storage and Maintenance Facilities, Material Storage Yards	Public Works Maintenance/Storage
Scott Center Annex	107	026	Equipment Storage and Maintenance Facilities, Material Storage Yards, Vehicle Storage and Maintenance Yards	Grounds Equipment, Transportation and Vehicle Holding
Scott Center Annex	273	026	Public Works Yards	Facilities Management, Public Works Storage
Scott Center Annex	277	037	Public Works Yards	Pest Control
Scott Center Annex	289	036	Materials Storage Yards, Recycling Facilities	Recycling Center

Summary of MS4 Regulated Buildings and Associated High Priority Municipal Activities

Installation	Building	Outfall(s)	Municipal Activity	Building/Facility Description
Dam Neck Annex	372	NR-006, SF-009	Vehicle Storage and Maintenance Yards	Operational Vehicle Garage
Dam Neck Annex	552	NR-025, SF-025, SF-029	Pesticide Storage Facilities	Pest Control Office/Storage
Dam Neck Annex	553	NR-025, SF-025, SF-029	Public Works Yards	Public Works Maintenance/Storage
Dam Neck Annex	585B	NR-025, SF-025, SF-029	Equipment Storage and Maintenance Facilities	Pavement/Grounds Equipment Shed
Dam Neck Annex	613	NR-025, SF-025, SF-029	Pesticide Storage Facilities	Pest Control Chemical Room
NAS Oceana	721	001	Equipment Storage and Maintenance Facilities	Public Works Shop
NAS Oceana	820	001	Equipment Storage and Maintenance Facilities, Vehicle Storage and Maintenance Yards	Public Works Maintenance Shop
NAS Oceana	3034	OF-006	Public Works Yards	Public Works Shop
NAS Oceana	3035	OF-006, OF-008	Public Works Yards	Public Works Shop

* Naval Station Norfolk Building NM-37 has been removed from the list since they are no longer performing maintenance onsite. They are currently taking vehicles to NAVFAC Transportation (LP-20) to get serviced (LP-20 is covered under the VPDES Industrial permit/program).

Appendix K – Nutrient Management Locations and Acreage

Navy MS4 Permit Coverage: VAR040114
Nutrient Management Plan Location/Acreage

Location	Installation	Latitude	Longitude	Acreage
Eagle Haven Golf Course	JEB Little Creek	36.917236	-76.155554	92.70
The Hornet Golf Course	NAS Oceana	36.803484	-76.026160	94.12
The Tomcat Golf Course	NAS Oceana	36.803484	-76.026160	125.22
Oceana Stables	NAS Oceana	36.810502	-76.006272	153.90
Sewell's Point Golf Course	NSA Hampton Roads	36.922904	-76.288183	111.58

Prestige Areas (contiguous areas > 1 acre where nutrients are applied)

Location	Installation	Latitude	Longitude	Acreage
Inside Track	NSA Portsmouth	36.847925	-76.313217	6.29
2 Baseball fields	NSA Hampton Roads	36.918769	-76.309931	5.09
Cutter Park	NSA Hampton Roads	36.930306	-76.299311	32.47
Building NH-33	NSA Hampton Roads	36.921550	-76.303964	1.34
Building CEP 156	Naval Station Norfolk	36.941614	-76.324250	4.86
Building CD 20-22	Naval Station Norfolk	36.941233	-76.310428	3.39
Building A-58	Naval Station Norfolk	36.949936	-76.317353	1.08
Building WB-200	Naval Station Norfolk	36.957158	-76.269175	6.77
			Total	61.29

Appendix L – MS4 Training Plan

MS4 Training Plan

MCM #6d. Pollution Prevention/Good Housekeeping for Municipal Operations

Training Topic	Training Requirement	Applicable Employees	Measurable Goals	Metric	Responsible Party	Schedule
Illicit Discharges	Provide biennial training to applicable field personnel in the recognition and reporting of illicit discharges.	PWD Transportation, PWD Public Works, Utilities, Contractors	In PY4 identify applicable personnel and generate training materials. In PY 5 provide the training.	Retain copies of training records for 3 years (to include training date, number of employees and objective of training).	Phase II Water Program Media Manager	Semi-Annually
Road, Street and Parking Lot Maintenance	Provide biennial training to applicable employees in good housekeeping and pollution prevention practices that are to be employed during road, street and parking lot maintenance.	PWD Transportation, PWD Public Works, PWD Utilities	In PY4 identify applicable personnel and generate training materials. In PY 5 provide the training.	Retain copies of training records for 3 years (to include training date, number of employees and objective of training).	Phase II Water Program Media Manager	Semi-Annually
Maintenance and Public Works Facilities	Provide biennial training to applicable employees in good housekeeping and pollution prevention practices that are to be employed in and around maintenance and public works facilities.	PWD Transportation, PWD Public Works, PWD Utilities	In PY4 identify applicable personnel and generate training materials. In PY 5 provide the training.	Retain copies of training records for 3 years (to include training date, number of employees and objective of training)	Phase II Water Program Media Manager	Semi-Annually
Pesticide and Herbicide Application	Ensure employees (and contractors) who apply pesticides and herbicides are properly trained or certified in accordance with the Virginia Pesticide Control Act.	Pest Management Personnel	In PY4 identify applicable personnel and verify they have the proper training.	Obtain copies of training records.	Phase II Water Program Media Manager	Annually
Virginia Erosion and Sediment Control Law/Regs Certifications	Ensure employees (and contractors) serving as plan reviewers, inspectors, program administrators and construction site operators obtain the appropriate certifications as required under the VESCL and its attendant regulations.	Inspectors (contractors), program administrators (MS4 Water Program Managers) and construction site operators.	In PY4 identify applicable personnel and verify they have the proper training.	Obtain copies of training records.	Phase II Water Program Media Manager	Annually
Virginia Erosion and Sediment Control Law/Regs Certifications	Ensure applicable employees obtain the appropriate certifications as required under the VESCL and its attendant regulations.	Inspectors (contractors), program administrators (MS4 Water Program Managers) and construction site operators.	In PY4 identify applicable personnel and verify they have the proper training.	Obtain copies of training records.	Phase II Water Program Media Manager	Annually
Recreational Facilities	Provide biennial training to applicable employees in good housekeeping and pollution prevention practices that are employed in and around recreational facilities.	MWR personnel	In PY4 identify applicable personnel and generate training materials. In PY 5 provide the training.	Retain copies of training records for 3 years (to include training date, number of employees and objective of training).	Phase II Water Program Media Manager	Semi-Annually

MS4 Training Plan

Training Topic	Training Requirement	Applicable Employees	Measurable Goals	Metric	Responsible Party	Schedule
Spill Response	The appropriate emergency response employees shall have training in spill responses. A summary of the training or certification program provided to emergency response employees shall be included in the annual report.	Emergency Response personnel	In PY4 identify applicable personnel and verify they have the proper training.	Retain a copy of the training or certification program provided to emergency response employees.	Phase II Water Program Media Manager	Annually
Stormwater training for contractors	The operator shall require that municipal contractors use appropriate control measures and procedures for stormwater discharges to the MS4 system.	Contractors	Training will be implemented in PY4-5.	Verify ECATTS training records. Record and report the number of people trained on each stormwater training module in ECATTS.	Phase II Water Program Media Manager	Annually

END OF REPORT