INTEGRATED CONTINGENCY PLAN

JOINT BASE LANGLEY EUSTIS – EUSTIS, VIRGINIA

June 2021

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RESPONSE PLAN COVER SHEET

Installation (Facility) Name	Joint Base Langley Eustis – Eustis (JBLE-Eustis)
Owner/Operator	U.S. Department of Defense Office of the Mission Support Group Commander JBLE-Eustis, Virginia 23604-5332 (757) 878-2908
Physical Location	1407 Washington Blvd. Fort Eustis, Virginia 23604-5306 (1 mile west of I-64 on Fort Eustis Blvd.)
Mailing Address	Civil Engineer Squadron (CES) - Installation (Management) Environmental (CEIE) 1407 Washington Blvd. Fort Eustis, Virginia 23604-5332
Installation Phone Number (Mission Support Group Commander)	(757) 878-2908
Dun and Bradstreet Number	Not applicable
Geographic Coordinates	Latitude: 37° 10” 12” N Longitude: 76° 34” 30” W
Facility Start Up Date	Port area: 1946 Felker Army Airfield: 1954
Facility Acreage	Approx. 8,000
Standard Industrial Classification (SIC) Code North American Industrial Classification System (NAICS)	9711 (National Security) 928110 (National Security)
Name of Protected Waterway or Environmentally Sensitive Area	James River, Skiffes Creek, Warwick River
Distance to Navigable Water	0-1/4 mile JBLE-Eustis is adjacent to James River. Skiffes Creek and Warwick River are present within the installation and discharge to James River.
Worst Case Discharge Amount	30,000 gallons
Maximum Oil Storage Capacity	271,174 (varies depending on number of drums stored at any one time)
Largest AST Capacity	30,000 gallons
Total Number of ASTs and Capacity	169 (227,364 gallons)
Total Number of USTs and Capacity	28 (187,300 gallons)
Total Storage of Drums and Transformers that Contain Oil	304 drums (estimated max.) 0 Transformers (Transformers are owned and operated by Dominion Virginia Power)
Number of Surface Impoundments and Total Storage of Surface Impoundments	No surface impoundments

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1 PLAN INTRODUCTION ELEMENTS

1.1 PURPOSE AND SCOPE OF PLAN COVERAGE

This Integrated Contingency Plan (ICP) provides the Joint Base Langley Eustis-Eustis (JBLE-Eustis) with a response management system that is adequately prepared to address a worst case discharge of oil (including fuel). This ICP only addresses the response plan requirements of 40 Code of Federal Regulations (CFR) Part §112.20 – §112.21 and 33 CFR Part 154 Subpart F.

- 40 CFR §112.20: JBLE-Eustis meets the criteria of a substantial harm facility based on the total oil storage capacity of greater than 42,000 gallons *and* the facility transfers oil over water to or from vessels.
- 33 CFR Part 154: This regulation applies to a facility that is capable of transferring oil or hazardous materials, in bulk, to or from a vessel, where the vessel has a total capacity, from a combination of all bulk oil or hazardous materials products carried, of 39.75 cubic meters (250 barrels) or more. Such a facility is considered to be a marine transportation-related (MTR) facility. The requirement to prepare a Response Plan applies to MTR facilities that, because of their location, could reasonably be expected to cause at least substantial harm to the environment by discharging oil into or on the navigable waters, adjoining shorelines, or exclusive economic zone. JBLE-Eustis is located on the shorelines of the navigable waters of the James River and several streams and transfers oil over water.

This ICP details procedures for mobilizing personnel and mitigation assets to respond to various discharge land-based and over-water scenarios. The responses are designed to minimize life threatening situations and damage to natural and cultural resources.

The ICP was developed in accordance with guidance provided by the United States Environmental Protection Agency (USEPA) published on June 5, 1996 (Federal Register Volume 61, Number 109) as the National Response Team's (NRT) ICP guidance. USEPA, in conjunction with agencies and departments that are members of the NRT, was designated to complete a review of federal release prevention, mitigation, and response authorities as a requirement of Section 112 of the Clean Water Act (CWA) amendments in 1990. The ICP guidance was developed by the NRT, along with the USEPA, to address concerns regarding multiple and overlapping federal requirements for installation emergency response plans.

JBLE-Eustis has elected not to include response plans related to storm water discharges associated with industrial activities, hazardous materials/hazardous waste, inclement weather, or security threats as part of this ICP. These types of incidents are addressed in separate plans and documents that are maintained by the JBLE-Eustis Installation (Management) Environmental (CEIE). Specific references to other documents and plans utilized at JBLE-Eustis are provided throughout the ICP as appropriate.

1.2 TABLE OF CONTENTS[1]

A table of contents that identify the ICP sections and annexes is provided on Page iii of this Plan.

This ICP is organized into the following three major sections:

[1] 33 CFR §154.1035(a)(4)

- **Chapter 1, Plan Introduction Elements**: This Section describes the purpose and scope of the Plan, a Table of Contents, current revision date, general facility identification information, and a brief profile of the facility and key personnel.
- **Chapter 2, Core Plan Elements**: This section contains essential response guidance and procedures. It provides the steps necessary to initiate, conduct, and terminate an emergency response action: 1) recognition, 2) notification, and 3) initial response, including assessment, mobilization, and implementation of resources. The following Appendices are included in the Core Plan:
  - Appendix A, Release Notification Requirements
  - Appendix B, Spill Report Form[2]
  - Appendix C, Acronyms and Abbreviations[3]
- **Annexes:** The Annexes contain supporting information for conducting an emergency response as described in the Core Plan. The annexes also document compliance with regulatory requirements not addressed elsewhere in the ICP. The annexes supplement Core Plan information and are referenced throughout the document.

1.3 CURRENT REVISION DATE

This Plan was developed from previous ICP versions in 2020-2021, but was further modified to comply only with 40 CFR §112.20-112.21 and 33 CFR Part 154 Subpart F. It was also modified to realign sections with the NRT's ICP Guidance.

Date of this Revision: June 2021

Amendments and changes to this Plan are shown on the table below.

Table 1-1. ICP Amendments and Revisions[4]

Date	Section of ICP	Brief description of amendment	Name (printed and signature) and Title
By signature on this page, I certify that I have completed the review and evaluation of the ICP and document the necessity for an amendment to this Plan.			

[2] 40 CFR Part 112 Appendix F 1.3.1
[3] 33 CFR §154.1035(e)(6)
[4] 33 CFR §154.1035(a)(6)

1.4 GENERAL FACILITY IDENTIFICATION INFORMATION[5]

The table below provides the general facility identification information.

Table 1-2. General Facility Identification Information[6]

Installation (Facility) Name	Joint Base Langley Eustis – Eustis (JBLE-Eustis)
Owner/Operator[7]	U.S. Department of Defense Office of the Mission Support Group Commander JBLE-Eustis, Virginia 23604-5332 (757) 878-2908
Physical Location[8]	1407 Washington Blvd. Fort Eustis, Virginia 23604-5306 (1 mile west of I-64 on Fort Eustis Blvd.)
Mailing Address[9]	CED/CEIE 1407 Washington Blvd. Fort Eustis, Virginia 23604-5332
Directions[10]	*From the North:* Take I 95-S to I 295-E around Richmond to I 64-E. Take Exit 250A onto JBLE-Eustis Boulevard which leads to the main gate. *From the South:* Take I 95-N to 58-E to I 64-W. Proceed over the Hampton Roads Bridge Tunnel on I 64-W and take Exit 250A onto Fort Eustis Boulevard which leads to the main gate.
Installation Phone Number (Mission Support Group Commander)	(757) 878-2908
Geographic Coordinates[11]	Latitude: 37° 10” 12” N Longitude: 76° 34” 30” W
Facility Start Up Date[12]	Port area: 1946 Felker Army Airfield: 1954
Facility Acreage	Approx. 8,000
SIC Code **NAICS[13]**	9711 (National Security) 928110 (National Security)

[5] 40 CFR Part 112 Appendix F 1.2; 33 CFR §154.1035(a)(1)
[6] 33 CFR §154.1035(a)(1) - (3)
[7] 40 CFR Part 112 Appendix F 1.2.4
[8] 40 CFR Part 112 Appendix F 1.2.1
[9] 40 CFR Part 112 Appendix F 1.2.1
[10] 33 CFR §154.1035(a)(2)
[11] 40 CFR Part 112 Appendix F 1.2.2
[12] 40 CFR Part 112 Appendix F 1.2.6
[13] 40 CFR Part 112 Appendix F 1.2.7

Table 1-3. Key Contacts

Department	Designation	Name of Contact	Contact Phone Number
Fire and Emergency Services (FES)	Primary Incident Commander (IC)	FES Mr. Dale Hankins, Fire Chief	**911** (757) 878-1008 (24 hrs/7 days)
FES	Alternate IC	On Duty Fire Chief	**911** (757) 878-1008 (24 hrs/7 days)
CES	Qualified Individual (QI)[14]	Base Civil Engineer	(757) 878-3642 or (757) 342-3576
CES	Alternate QI[15]	CES Deputy Director	(757) 878-4316 or (757) 342-2152
CES/CEIE*	Primary CEIE Contact	Mr. Paul A. James Spill Program Manager, CEIE, 733rd Mission Support Group (MSG)	(757) 878-7362 (office) (757) 644-7411 (cell)
CES/CEIE*	Secondary CEIE Contact	Mr. Donald W. Calder Jr. Chief, CES/CEIE, 733rd MSG	(757) 878-7380 (office) (757) 503-0075 (cell)
*CEIE is responsible for ICP development and maintenance.			

1.5 BRIEF FACILITY PROFILE[16]

Joint Base Langley Eustis-Eustis (JBLE-Eustis) is a federal military reservation contiguous to Newport News, Virginia. It is an active military installation facility, supporting both peacetime and wartime missions, which houses a variety of military organizations, non-Department of Defense (DoD) tenants, and support and recreational activities as well as military personnel and their dependents.

Roughly 16,900 military (Army, Air Force, Navy, and Marines), Coast Guard, civilian personnel and military dependents work and live on the installation with approximately 4,200 military members and their dependents residing on the installation 24-hours daily. The installation also provides support to an estimated 59,048 active-duty family members, retirees, and retirees' family members. Support activities included on the installation consist of a child development center, health clinic, dental clinic, elementary school, bowling alley, gymnasiums, aquatic center, commissary, post exchange, theater, golf course, go-cart track, hiking trails, riding stables, Fort Eustis Club, and tennis courts.

JBLE-Eustis is the home of the Headquarters (HQ) United States (U.S.) Army Training and Doctrine Command (TRADOC), the Army Training Support Center (ATSC), and the 7th Transportation Brigade (Expeditionary). TRADOC is responsible for developing, educating, and training soldiers and civilians; supporting unit training; and designing, building, and integrating capabilities, formations, and equipment. The ATSC, based at JBLE–Eustis, is responsible for

[14] 40 CFR Part 112 Appendix F 1.2.5; 33 CFR §154.1026(a)
[15] 40 CFR Part 112 Appendix F 1.2.5; 33 CFR §154.1026(a)
[16] 40 CFR Part 112 Appendix F 1.2.7

managing the Army Training Support Enterprise (TSE), which provides oversight for programs that enable development, delivery, and sustainment of training and education support capabilities. The 7th Transportation Brigade (Expeditionary) provides logistics support around the world for port, terminal, and watercraft units conducting expeditionary operations in support of land operations. Other units on JBLE-Eustis include the Army Aviation Logistics School, Non-commissioned Officer's (NCO) Academy, Aviation Applied Technology Division (AATD), and the James River Reserve Fleet.

General installation information is provided in **Table 1-2**. Key contacts are identified in **Table 1-3**.

The installation operates a Jet Fuel F-24 Terminal near Felker Army Airfield and an oily water pretreatment facility in the Third Port Area.

The James River Reserve Fleet, which belongs to the Maritime Administration (MARAD), leases land at JBLE-Eustis and maintains vessels moored in the James River. The vessels moored in the James River are not addressed under the scope of this ICP.

The installation is open to authorized personnel and troops during normal duty hours (0500 – 2100 hours). JBLE-Eustis is also visited by tourists and may be utilized by private and public entities for various non-military functions, such as conferences, Boy Scout jamborees, and carnivals. In addition, many contractors and vendors routinely work at JBLE-Eustis, while other contractors perform a variety of short-term work.

JBLE-Eustis is located in southeastern Virginia on the Virginia Peninsula, on the northwest side of the City of Newport News, approximately one mile west of Interstate 64 off Exit 250A. An installation location map is provided as **Figure 1 in Annex 1**. JBLE-Eustis is located on the northern side of the sheltered deep-water harbor known as Hampton Roads and is bounded by James City County to the north, the Warwick River and City of Newport News to the east, and the James River to the west and south. **Figure 2 in Annex 2** shows the topography of the area and the location of creeks and rivers in the vicinity of JBLE-Eustis.

JBLE-Eustis occupies approximately 8,000 acres (12.9 square miles) and is divided into several functional (operations, training and recreational) areas. The layout of the installation is provided in **Figure 3 in Annex 1**.

1.6 PLAN IMPLEMENTATION

JBLE-Eustis is committed to following the procedures, organization, and guidance contained in this ICP. JBLE-Eustis personnel, including officers, soldiers, and installation personnel are required to become familiar with the contents of the ICP and are responsible for managing the emergency activities in accordance with this ICP's procedures. This is accomplished through annual training and drill exercises.[17] Training and drills are described in **Annex 5**.

Copies of this ICP are maintained at the CEIE office. Authorized personnel and federal, state, and local authorities will also be able to access this ICP for on-site review during normal business hours. Requests to review this ICP are to be directed to the CEIE Spill Program Manager.

[17] 33 CFR §154.1055; 33 CFR §154.1050

The JBLE-Eustis emergency response planning procedures are coordinated with appropriate federal departments responsible for emergency response management. Off-site contacts (state and local agencies) are provided with a copy of this ICP for their review and coordination. Off- site assistance personnel may perform site visits and reviews for purposes of familiarizing themselves with installation operations, physical layout, and emergency response procedures and capabilities.

A copy of this ICP has been provided to JBLE-Eustis FES. The ICP will serve to coordinate off-site efforts for emergency response assistance at JBLE-Eustis, if necessary. The following additional agencies will be contacted to inform them that the ICP is available for their reference:

- USEPA Region 3
- Virginia Department of Environmental Quality (VDEQ)
- Virginia Department of Emergency Management (VDEM)

For the remainder of this document, "ICP" and "Plan" will be used interchangeably.

1.7 PLAN SUBMISSION

This ICP must be submitted to the Regional Administrator for USEPA Region 3.[18]

This ICP must be submitted to the United State Coast Guard (USCG) Captain of the Port (COTP).[19]

See **Annex 6** for ICP review, revision, and resubmission requirements.

[18] 40 CFR §112.20(a); 40 CFR §112.20(d)(1)
[19] 33 CFR §154.1017; 33 CFR §154.1065

2 CORE PLAN

The effectiveness of this ICP is dependent upon timely discovery, response, and containment actions, as well as prompt management decisions. Therefore, this section provides essential steps necessary to initiate, conduct, and terminate an emergency response action: recognition, notification, and initial response, including assessment, mobilization, and implementation.

2.1 DISCOVERY

Discovery of a spill, discharge, release, etc. (hereafter referred to as "spill") involves identification that a spill has occurred. Spills must be reported to FES immediately, regardless of the quantity discharged, the location, or media affected. The discovery of a spill will most likely be reported by the discoverer using a telephone or cell phone or by the Military Police using a dedicated radio channel to contact FES. Assessing the scope of the problem will consist of the evaluation of a combination of elements.

The procedures below will be followed in case of an oil (including fuel) or bilge water spill at the installation. Bilge water may contain water, oil, urine, detergents, solvents, chemicals, pitch, and/or particles. These steps are applicable if a reportable quantity of oil/bilge water is spilled on land, storm drain, catch basin, or has reached the James or Warwick River, either directly or indirectly (via a stream or wetland release).

The person discovering a release or spill will take the following steps:[20]

1. **Stop the product flow.**
   Act quickly to secure pumps, valves, etc., *if safe to do so*.
2. **Stop flow to off-site area.**
   Protect potentially affected drains and culverts using on-site containment equipment.
3. **Shutoff ignition sources.**
   Motors, electrical circuits, open flames, hot work, etc.
4. **Warn personnel.**
   Enforce safety, evacuation, and security measures.
5. **Make notifications.**
   Contact:
   - FES (**911**) or (757-878-1008)
   - CEIE (757-878-7362)
6. **Initiate containment.**
   Place oil containment boom around the leaking container and/or in the water.
7. **Supervise response resources.**
   FES and/or CEIE must supervise the Facility Response Team (FRT) spill mitigation actions.

It is the policy of JBLE-Eustis that an aggressive pollution prevention program will be followed at the installation, and that spills will be avoided to the maximum extent possible. If, however, a

[20] 40 CFR Part 112 Appendix F 1.7.1.2A

spill occurs, it will be immediately reported and necessary personnel will respond rapidly and appropriately.

Installation inspections are conducted routinely by personnel responsible for each respective organization or by the CEIE. ASTs are inspected periodically according to the frequencies described in the Spill Prevention, Control, and Countermeasures (SPCC) Plan and inspection results are documented and maintained onsite with the responsible organization.

If an emergency is discovered, such as an oil spill or the potential for an oil spill, the discoverer is required to contact FES or CEIE. **Appendix A** provides the spill notification requirements used in the event of a spill. FES and/or CEIE will implement the incident response activities detailed in this plan. Installation personnel that handle oil are trained annually in pollution prevention techniques. CEIE provides annual training which discusses JBLE-Eustis' requirements for AST management. JBLE-Eustis follows the VDEQ's AST Management requirements presented under Chapter 9, Section 9 Virginia Administrative Code (VAC) 25-91-130. CEIE's Spill and Emergency Response Training Presentation materials are available in The Environmental Awareness Course Hub (TEACH).

FES and CEIE both maintain a list of personnel at the installation that need to be notified in the event of an oil spill or release. This internal notification list is provided in **Annex 2**.

2.2 INITIAL RESPONSE[21]

Initial response involves procedures taken upon discovery of the spill through the time that the spill is determined to be under control by the Incident Commander (IC). At that point, the incident will transition to sustained and recovery actions. The response time for each on-base member notified of a response is 15 minutes or less.[22] JBLE-Eustis personnel recalled from *off-base locations* will be accessible by telephone within 30 minutes and on-base within 120 minutes.

2.2.1 Procedures for Internal and External Notifications

2.2.1.1 Internal Notifications[23]

The party responsible for the spill or the individual identifying the spill will make an initial notification to FES. JBLE-Eustis emergency response systems are activated by dialing **911**. The 911 systems are active 24 hours a day and feed to FES. The alternate telephone number for FES is **(757) 878-1008** (active 24 hours a day).

FES will make internal notifications as needed (QI, CEIE, CES, Military Police, Public Affairs, etc.). Internal contacts will primarily be contacted by using the telephone or two-way radio. A brief list of key personnel is provided below in **Table 2-1**. A comprehensive list of primary notification phone numbers is listed in **Annex 2**.

[21] 40 CFR Part 112 Appendix F 1.6.1, 1.7.1
[22] 40 CFR Part 112 Appendix F 1.3.4
[23] 40 CFR Part 112 Appendix F 1.3.1

Table 2-1. Key Spill Notification Contacts[24]

Team Member	Organization	Name	Contact Number
Emergency Response Personnel			
Incident Commander (IC)	FES	Mr. Dale Hankins	**911** (757) 878-1008
Qualified Individual	CES	Base Civil Engineer	(757) 878-3642 or (757) 342-3576
FRT	Various	See **Table 2-2**	
Other Personnel			
Third Port Area (Hazardous waste storage area)	7th Transportation Brigade (expeditionary)	Mr. Ray Perea	(757) 272-9642 (757) 878-4688
Felker Army Airfield Jet Fuel F-24 Fuel Terminal	Directorate of Plans, Training, Mobilization and Security (DPTMSEC), Aviation Division	Mr. Teddy Harlow	(757) 812-0808
James River Reserve Fleet	Maritime Administration	Mr. Martin Walker	(757) 887-3233
Tactical Vehicle Refueling Point (TVRP)	Directorate of Logistics (DOL) Northrup-Grumman Technical Services, Inc. (contractor for DOL)	Mark Morris	(757) 878-6096
Army and Air Force Exchange System (AAFES)	AAFES	Roy Punzalan	(757) 962-3766
Spill Program Manager	CES/CEIE	Mr. Paul A. James	(757) 878-7362
Tanks Program Manager	CES/CEIE	<TBD>	(757) 878-4123
Storm and Wastewater Program Manager	CES/CEIE	Ms. Amy Green	(757) 878-5218
Transformers	Dominion Virginia Power	Mr. Steve Buehl	(804) 257-4933

[24] 33 CFR §154.1035(e)(2)

Table 2-2. Facility Response Team

Member	Phone Number (day/evening)	Alternate Phone Number
JBLE-Eustis Fire and Emergency Services (FES)	911	(757) 878-1008
Spill Program Manager	(757) 878-7362 (office) (757) 644-7411 (cell)	(757) 878-4123 (Tanks Manager)
Harbormaster Third Port	(757) 878-4688 (24 hrs)	Not applicable
Civil Engineer Squadron (CES) Environmental Chief	(757) 878-7380 (office) (757) 503-0075 (cell)	(757) 878-7362 (Spill Program Manager)
733d Mission Support Group	(757) 878-2908	(757) 878-1290
Provost Marshal/Military Police	911	(757) 878-4555
Medical and Dental Administration (Ambulance)	911	Not applicable
Installation Safety Office	(757) 501-8224	Safety Hotline: 757-268-8967 After normal work hours: (757) 314-7859
Preventive Medicine	(757) 314-8031	Safety Hotline: 757-268-8967 After normal work hours: (757) 314-7859
Public Affairs Office	(757) 878-4920	After normal work hours: (757) 764-5411 (Security Forces)
Fire Chief/Incident Commander (IC)	(757) 878-4218	(757) 878-1008
HEPACO Inc. (emergency response contractor)	1 (800) 888-7689	(757) 543-5718

2.2.1.2 External Notifications[25]

External notifications are made by telephone. Sufficient land-based telephone resources exist at JBLE-Eustis so that an alternative form of communication should not be necessary. Cellular telephones are readily available if land-based telephones prove unusable. In the worst case, where other communication forms have failed, a courier would be dispatched to initiate contact with the proper regulatory agencies.

The type of external notifications to be made are related to the size of the incident, the substance spilled, and the affected or potentially affected environment. A partial list of External Notification contacts is provided in **Table 2-3**. The QI and IC will ensure proper notifications are completed and documented. A list of potential internal/external notifications is included in **Annex 2.**

Spills are reported to FES and/or CEIE. The FES and/or CEIE are authorized by way of delegation to contact the appropriate agencies.

[25] 40 CFR Part 112 Appendix F 1.3.1

Table 2-3. External Notifications

Organization/Person	Phone Number
National Response Center	1-800-424-8802
Virginia Department of Environmental Quality (VDEQ) – Tidewater Region	9 AM – 5 PM (757) 518-2000 5 PM – 9AM call VDEM Cell Phone: (757) 435-5194
Virginia Department of Emergency Management (VDEM)	1-800-468-8892
Virginia Department of Fire Programs (Fire Marshal)	804-371-0220
Hampton Division of Fire & Rescue	757-727-6580
Federal On-Scene Coordinator (OSC) USCG Sector Hampton Roads	(757) 668-5560
Emergency Contractor (HEPACO)	1-800-888-7689 (757) 757-543-5718
Virginia Emergency Operations Center State Emergency Response Commission (SERC)	800-468-8892 804-674-2400
Virginia State Police	804-674-2000
Ready Hampton Roads (Local Emergency Planning Committee [LEPC])	757-565-7617 (office) 757-903-9676 (cell)
Hampton Roads Sanitation District (HRSD) Chief of Pretreatment and Pollution Prevention After-Hours HRSD Emergencies	757-460-2491 757-460-7045 Middle Peninsula: 877-261-8411 Peninsula: 757-874-3979 South Hampton Roads: 757-460-3200
Hampton Roads Planning District Commission (local water supply system)	(757) 420-8300
JBLE-Eustis Weather Station (usaf.jble.1-fw.mbx.ol-a-weather-flight@mail.mil)	757-878-5300
Local Television/Radio Station for Evacuation Notification	Public Affairs Office maintains list
McDonald Army Health Clinic, JBLE-Eustis	757-314-7501 757-314-7500
Bon Secours Mary Immaculate Hospital	757-889-5810

2.2.2 Establishment of a Response Management System

The response management system for spills at JBLE-Eustis is executed under the National Interagency Incident Management System (NIIMS) Interagency Command System. This basic system allows for flexibility by permitting the IC and the QI to activate the necessary spill response elements. The system also provides for unity of command to ensure that a single individual, the QI or the IC, is in charge of the spill response.

The particular command structure used for each incident will necessarily be based on the details of the situation and based upon the judgment of the QI and IC. The overall command structure for spill response is shown in **Annex 3, Attachment 3A**. The QI and IC will use their judgment to activate or retract resources for the spill incident.

Table 2-3 lists the FRT contacts for JBLE-Eustis.[26] The response time for each on-base member notified of a spill event is expected to be 15 minutes or less. The on-base emergency response contact can respond within 15 minutes.[27] JBLE-Eustis personnel recalled from off-base locations will be accessible by telephone within 30 minutes and on-base within 120 minutes.

2.2.3 Procedures for Preliminary Assessment of the Situation

The FES functions as the first responder and the Fire Chief is the IC. The IC and other FES members will identify what steps are taken with locally available resources to provide safe and effective control and cleanup of the spill. In each emergency incident, the responsible party is required to provide spill-related information to the FES upon request.

The IC will initiate an evaluation of the spill scene. Relevant questions used to evaluate the spill include, but are not limited to the following:

- **What type of emergency is occurring?**

  The answer to this question identifies whether the substance spilled is an oil product and the quantity discharged. This will establish if the individual responding to the spill is capable of dealing with the spill and what specific resources will be needed for the spill response.

- **What areas/resources have been or will be affected?**

  The answer to this question generally occurs in concert with the answer to the first question above. The answer helps establish strategies for specific actions that will be taken to control the spill and/or protect specific areas or resources. A key part of this answer is identifying if the spill is land borne, if the spill has the potential to become waterborne, or if the spill has already become waterborne. The answer to this question will establish the individuals to be contacted, what resources are employed, and what actions are taken.

- **Is an exclusion zone needed?**

  The answer to this question identifies whether the spill presents a hazard to human health and safety, thus necessitating an evacuation of a specific area of the installation.

- **Is the source under control?**

  The answer to this question will establish whether the container that held the spilled substance is continuing to discharge its contents and whether the spilled substance is mobile or immobile. Specific courses of action will be taken based on this answer.

Note: There is not a formal process for how the questions are to be answered. The specific situation may dictate that other relevant questions or concerns be addressed in order to adequately evaluate the spill. The purpose of this section is to assist the IC with a method of conducting a

[26] 40 CFR Part 112 Appendix F 1.3.4
[27] 40 CFR Part 112 Appendix F 1.3.4

spill evaluation. Ultimately, the evaluation of the spill incident is based on the judgment of the IC.

The evaluation of the spill identifies how the spill is classified with regards to two specific concerns:

1. Can the spill be cleaned up by the responsible party under the supervision of FES, or
2. Does the spill require a full FES response?

This evaluation leads to the selection of the proper command structure by the QI/IC and the process for dealing with the spill. The following bullets presented below are addressed in more detail in **Annex 3** attachments:

- Potential types of incidents: an analysis of the potential incidents at the facility.
- Hazard evaluation: an evaluation of the hazards present at the facility.
- Vulnerability analysis: an analysis of vulnerable receptors (e.g., human populations, both workers and the general public, environmentally sensitive areas, and other facility- specific concerns).
- Procedures for establishing objectives and priorities: a discussion of which risks deserve primary consideration during an incident.

The following definitions, in regard to an incident, are used for the purpose of this ICP.

- **Leak or Leakage:** A leak or leakage means an escape of oil from tanks, drums, piping, or other containers used in the normal course of storage, transfer, processing or use in a secondary containment or diversion system or onto impervious surfaces from which it is cleaned up before it contacts the ground surface or water.
- **Spill or Release:** A spill/release of oil is defined as an occurrence where an oil product escapes from the primary container and comes in contact with the ground surface or water. This would include a spill that is contained within a secondary containment area that contains a pervious surface.
- **Discharge:** A discharge refers to an intentional or unintentional action or omission resulting in the release, spilling, pumping, pouring, emptying or dumping of oil into any surface water or stormwater catch basin that discharges to surface water.

Note: A leak could become a potential "reportable spill." If there is a spill or other discharge of oil, then JBLE-Eustis must review the appropriate Reportable Quantities (RQs) and assess if the situation requires reporting to applicable regulatory agencies. **Table 3-4** provides a list of the RQs for oil and fuel products found at JBLE-Eustis. **Potential oil spill sources are addressed in detail in Annex 3, Attachment 3H.**

Table 2-4. Reportable Quantities for Oils and Fuels Stored at JBLE-Eustis

Regulated Substance	Reportable Quantity
Motor Oil	25 gallons
Used Oil and Oily Water	25 gallons
Jet fuel F-24	25 gallons
Diesel fuel	25 gallons
Gasoline	25 gallons

Notes:

Pursuant to the VDEQ regulations, an immediate telephone call is to be made to the VDEM at **1-800-468-8892 or 804-674-2400** if one of the following occurs:

- The amount of oil violates applicable state water quality standards,
- The amount of oil causes a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines,
- The amount of oil causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

2.2.4 Procedures for Establishment of Objectives and Priorities

The immediate objectives and priorities for spill response are completed by persons reporting the spill. Procedures for the completion and priorities for a spill will be site and spill specific, and based on the judgment of the persons present at the time of the spill.

The individual(s) reporting the spill ensure the safety of personnel through restricting access to the spill area and/or evacuation of the spill area. The IC ensures that appropriate safety precautions are implemented to protect response personnel and any additional personnel located in close proximity to the probable spill route or impact area. Safety precautions include restricting access to the area, use of personal protective equipment, and evacuation. If the source of the spill can be safely contained without threat to human health and safety, the environment, or property, the initial response actions include stopping the flow.

The Fire Chief has the overall responsibility, and maintains site command and control of incidents at JBLE-Eustis. The Fire Chief will act as JBLE-Eustis IC and has the control, containment, cleanup and reporting responsibilities associated with an incident. Contact information for the Fire Chief follows:

Fire Chief, Mr. Dale Hankins
JBLE-Eustis, Virginia 23604-5000
(Direct Work Line) **757-878-4218**
(24 hour) **757-878-1008, or 911**

In the absence of the IC, a designated alternate will perform the duties of the IC. The IC and alternate IC have full authority to implement spill removal operations. The QI has the contracting authority to engage outside resources. During spill events, the Fire Chief heads the FRT and serves as the IC. FES Base Station, Building 648, serves as the fixed Command Post for all emergency operations. The FES Base Station has sufficient communication assets, including radios, telephones, and cellular telephones that can be used to coordinate tactical actions, as well as

coordinating with supporting elements of the FRT and notifying organizations and agencies outside of JBLE-Eustis.

2.2.5 Procedures for Implementation of Tactical Plan

The QI and IC are responsible for activating and authorizing action of appropriate members of the command structure based upon the evaluation of the spill. The strategic goals and assessment of tactical options and resources include:

- Identification
- Notification
- Isolation
- Protection
- Spill Control
- Leak Control
- Fire Control
- Recovery/Termination

2.2.5.1 Immediate Goals/Tactical Planning

The steps below provide the steps JBLE-Eustis will follow for the protection of workers and the public in the event of a petroleum spill or hazardous substance release.

Step 1

The safety of the installation's personnel and other staff shall always be of primary consideration. Assessment or containment activities will not be attempted if doing so would risk the lives or health of personnel.

Step 2

An immediate assessment of the source and location of the spill, the product spilled, and the probable amount of spilled or missing product will be made. This assessment will include the following:

- An estimate of the spill size and any further threat it may present,
- The observed movement of the discharge (speed and direction),
- Waters, shoreline, or other areas that may be affected,
- Anticipated environmental damage,
- The observed wind direction/velocity,
- The tidal stage at the time of the spill and tidal forecast, if relevant, and
- The observed and expected river current, if relevant.

Step 3

If no danger to an employee will result, immediate measures will be taken to stop the flow of spilled product using existing mechanical means.

Step 4

If the flow of spilled product cannot be stopped by mechanical means, measures will immediately be taken to reduce the source of the spilling product.

Step 5

Because of the installation's locality along the tidally-influenced James River, as well as other water resources, priorities to protect potentially affected natural resources by an oil spill are as follows:

Priority One – Health and Welfare

Potential spills on JBLE-Eustis property would usually be contained within secondary containment and cleaned up. If the spill breached containment it could potentially flow into one of the following adjacent water courses: Skiffes Creek, James River or Warwick River. There is little probability of a discharge from the installation impacting the publically accessed land area surrounding JBLE-Eustis.

Priority Two – Environmentally Sensitive Areas

Steps are initiated to prioritize and protect sensitive and vulnerable areas such as wetlands, water supplies, waste treatment plants, or recreational waters. Appropriate personnel and organizations will be notified by the QI, IC, or designee if sensitive areas are likely to be affected from the spill.

Both sides of the James and Warwick Rivers, and their tributaries, consist of sensitive shoreline inhabited by diverse populations of wildlife. The prioritization of which area to protect first is a function of response time, basing decisions using the "sensitivity" information found in **Annex 3**, and oil movement. These elements must be used in conjunction with each other, along with a sound knowledge of the local tidal current conditions. The proximity of the installation to some of these areas makes it unlikely that impact could be avoided in the event of a large discharge. A prudent response dictates case-by-case analysis based on prevailing conditions.

2.2.5.2 Mitigating Actions

Specific actions to be taken in the event of a spill are:

1. a) Flammable spill - remove sources of potential ignition and turn off electrical power to minimize fire hazards.

   b) Volatile materials spilled inside a building - ventilate the area.

2. Stop the flow of material by plugging the leak, placing the broken container in a containment device, or using any other expedient method available.
3. Contain spilled material to keep it from spreading and flowing beyond the immediate area or into storm or sanitary sewer drains by using plugs, mats, socks, sorbents, dikes, booms, combination of the previous mentioned items or use other available resources. Spill containment procedures as directed by the IC are to be implemented with the objective of being able to confine the spill as close to the source as practicable and, if possible, prevent spills from exiting the property limits of the installation.

For small, easily contained discharges, emergency response personnel are able to respond with oil absorbents as required by the specifics of the discharge. For discharges with potential off-site impacts, emergency response personnel are directed to:

- Protect storm drains.
- Immediately notify the IC; then notify CEIE.
- Prepare to deploy oil containment socks and/or boom as a precautionary measure.

- Small (uncontained), medium, and worst case discharges are immediately reported to the FES and/or CEIE, which provides notification to appropriate personnel, government agencies, emergency agencies, and emergency response contractor(s), as necessary. Emergency response personnel located on site are directed to:
  - Evacuate any potentially dangerous areas,
  - Secure discharge source and immediately contain the spill, and
  - If requested, await assistance from the oil spill response organization (OSRO).

The OSRO has the ability to respond to an emergency at the installation within a short period of time. JBLE-Eustis' OSRO has equipment and personnel that can be mobilized to respond within 1 hour after notification. The response resources for small, medium, and worst case spills are discussed in **Annex 3**.

Several federal regulations require the identification of worst case discharge planning volumes. JBLE-Eustis meets the substantial harm criteria in accordance with 40 CFR Part 112, Appendix C, Attachment C-II. The Certification of the Applicability of the Substantial Harm Criteria for JBLE-Eustis is provided in (**Annex 3 Attachment 3E**). Because JBLE-Eustis is subject to regulation by both the USEPA and the USCG, a worst case discharge scenario has been developed for both a transportation-related and a non-transportation-related facility on the installation, with the higher discharge selected as the planning volume for JBLE-Eustis. The methods for calculating worst case planning volumes are found in 40 CFR 112 Appendix E. **Annex 3 Attachment 3F** provides the Worksheet to Plan Volume of Response Resources for Worst Case Discharge for JBLE-Eustis. This satisfies both USEPA and USCG regulations. **Annex 3 Attachment 3J** provides JBLE-Eustis Response for Oil Discharges.

2.2.5.3 Identification of Resources Required for Response

The QI and IC will identify whether sufficient local resources are available to control the spill. The QI and IC have the flexibility to select the resources necessary to properly respond to an incident and what course of action to follow.

2.2.6 Procedures for Mobilizing Resources

If additional spill response resources are required, the QI/IC will designate an individual to perform notifications for mobilization. The specific resources to be mobilized are left to the discretion of the QI and IC; however, a listing of resources and suggested or required notifications are provided in **Annex 2**.

2.3 SUSTAINED ACTIONS[28]

Sustained actions are those actions taken after the spill is considered to be controlled and no longer represents an immediate threat to human health and the environment. The IC will determine when a spill is controlled and what resources are necessary to complete the site cleanup. The IC is the sole individual who may release resources from a spill site. This decision is made based on the current situation and progress of the spill cleanup and recovery operations.

Once the spill has been contained, cleanup actions will be initiated using committed resources, if possible. In cases where the committed resources alone cannot meet the requirements for cleanup and disposal, the IC will request additional resources. The QI is authorized to release funding and

[28] 40 CFR Part 112 Appendix F 1.7.1

activate additional resources. The services of emergency response contractors and additional contractors are used when their expertise and services are warranted. Pollutants will be collected and disposed in accordance with installation policies and regulatory requirements. **Annex 3** provides details of available resources and the requirements necessary to complete the site cleanup. It is the JBLE-Eustis policy to retain spilled material and disposable response equipment until it can be recycled or disposed of in an appropriate and legal manner.

After assessment of the situation, notification, containment, and mitigation, more prolonged mitigation measures, recovery actions, and cleanup will be performed, as appropriate. Such measures may include:

- Damaged Container Handling

  Damaged container handling involves the handling and removal of damaged containers that are 55 gallons or greater. Due to the potential danger in these operations, a damage assessment is performed before these operations are initiated.

- Product Transfer

  Product transfer involves transferring recoverable material from the original container to another approved container.

- Additional Internal Notification
  - Spilled oils and fuel have potential to damage wastewater treatment plant systems. Therefore, in the event of a release to a sanitary sewer system, the QI, IC, or designee will notify, either directly or through delegation, the appropriate sewage treatment plant as soon as possible after a spill has occurred.
  - The QI, IC, or designee will advise the Public Affairs Officer, as soon as practical, of the nature of the spill and any response actions taken. Military Police are notified to provide site security and traffic control and to investigate the cause of the spill.

- Contaminated Material Removal

  Oil-contaminated soil or water or other media will be recovered and containerized for characterization and disposal. Refer to the Hazardous Waste Management Plan for procedures for waste characterization and management.

2.4 TERMINATION AND FOLLOW-UP ACTIONS

The IC is the sole individual who may release resources from a spill site. This decision will be made based on the current situation and progress of the spill cleanup and recovery operations. The QI will notify off-site resources (i.e., contractors) when services are no longer required. The QI will also engage the resources for any long-term investigation and remediation that may be required.

2.4.1 Debriefing

A debriefing will be held immediately after the incident is resolved. The debriefing will consist of four steps:

1. Timeline development. A timeline of the spill incident will be created so that the cause of the spill is identified and the personnel involved in the spill response can review actions taken and recommend any corrections or improvements to the spill response program (i.e., hot wash or lessons learned exercise).

2. Hazard communication/employee right-to-know. Individuals involved with the spill or spill response will be informed of the substance spilled and of the potential hazards and effects of exposure.
3. Incident Log. The IC, with the assistance of CEIE, will maintain a spill incident log detailing actions taken during the course of the spill response. The log will satisfy the written notice requirements of Superfund Amendments and Reauthorization Act (SARA) Title III. Additionally, a *Spill Report Form* must be completed for all spills and provided to CEIE by the next working day after the incident. The *Spill Report Form* is provided in **Appendix B.**
4. Corrective Actions at the Spill Site. The IC assures the proper disposal of site-collected wastes through CEIE. The spilled material is disposed of in accordance with current federal, state, and local hazardous waste disposal regulations and installation policies. Waste profiles will be obtained for the spilled substance prior to disposal (refer to the Hazardous Waste Management Plan [HWMP] for waste profiling procedures).

2.4.2 Investigation and Remediation

For releases, spills, or leaks from underground storage tanks (USTs), initial abatement measures, site characterization, free product removal, investigations for soil and groundwater cleanup, and corrective action will be performed in accordance with USEPA Underground Tank Regulations, 40 CFR 280.60 - 280.66 and Virginia UST regulations (9 VAC 25-580).

Remedial procedures and cleanup levels for other contaminants in soils or water are governed by the National Oil and Hazardous Substances Pollution Contingency Plan under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (40 CFR Part 300). However, residual contamination in soil or water must be addressed.

Investigation and remediation of a spill site may include the following steps:

1. Short-term Cleanup. Short-term cleanup involves efforts to remove as much of the spilled material as possible. Cleanup of pollutants in surface water is the responsibility of the IC.
2. Long-term Investigation and/or Cleanup. Long-term cleanup and recovery operations involve large-scale groundwater and/or soil cleanup projects. These projects are coordinated by the CEIE and would most likely use the contracting ability of CED. This effort may include further investigation of the extent of the impact of the release on the environment and additional cleanup of soil, groundwater, or shoreline. The VDEQ and the USEPA should be consulted in designing a sampling and analysis plan to make sure that the number of samples, sampling locations, and analytical protocols are appropriate for the site and situation. Typically, sampling is performed by CEIE, but may be performed using contractor support. CEIE will ensure that samples are collected to sufficiently identify the chemical nature, concentration, and extent of the spill for response actions and for possible future legal action.
3. Determination of the Responsible Party. The IC will direct response actions; however, responsible parties have overall responsibility for the cleanup and disposal including costs and property damage. This pertains to tenants, activities, and contractors.
4. Determination of the Nature and Cause of the Spill. The IC will investigate and document the cause of the spill. The IC and CEIE will recommend measures to prevent similar releases.

2.4.3 Completion of Spill Event Activities

The following actions must occur before a spill event is considered complete.

- The IC has confirmed that the necessary corrective actions, including sampling and monitoring, are initiated.
- Changes to spill response procedures at the unit/garrison level are identified and forwarded to the proper entity for implementation.
- Required notifications are completed. In addition to internal and external notifications, follow-up information may be required to be submitted to VDEQ. The supplemental information should summarize the incident, response, and cleanup actions implemented, as well as any injuries or death of wildlife resulting from the spill.
- Wastes generated from the spill incident are properly containerized, stored, and disposed in an appropriate legal manner.
- Damage assessments are initiated.
- An analysis to determine the root cause of the incident is performed. Using this information, a means of preventing spills of this nature are documented and feasible preventive measures are implemented.

APPENDIX A
RELEASE NOTIFICATION REQUIREMENTS

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RELEASE NOTIFICATION REQUIREMENTS

Notifications regarding releases have to be made first to state and local authorities. Federal authorities have to be notified when the situation warrants.

A.1 FEDERAL

Reportable Release:

A reportable discharge of oil is defined as:

- A release of oil to navigable water that violates an applicable water quality standard, or
- Causes a film or sheen upon, or discoloration of, the surface of the water or adjoining shorelines, or
- Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines (refer to 40 CFR §110.3).

Releases of hazardous materials or hazardous waste that poses an immediate or imminent threat to public health must also be reported (9 VAC 20-60-264(B)(31)(d)).

Report releases to:

National Response Center:	**(800) 424-8802**
USEPA, Region 3:	**(800) 438-2474**

Release Notification Requirements (40 CFR §112.4):

If the discharge is to a navigable water of the United States and is in excess of 1,000 gallons in a single discharge, or is the second discharge of more than 42 U.S. gallons to occur within a 12-month period, a specific information must be submitted within 60 days to:

Region 3 Administrator
USEPA Region 3 Regional Office
1650 Arch Street
Philadelphia, PA 19103-2029

This report must include the following information:

1. Name of the facility.
2. Name(s) of the owner or operator of the facility.
3. Location of the facility.
4. Maximum storage or handling capacity of the facility and normal daily throughput.
5. The corrective actions and countermeasures taken, including a description of equipment repairs and replacements.
6. Description of the facility, including maps, flow diagrams, and topographical maps.
7. The cause(s) of the discharge, including a failure analysis of the system or subsystem in which the failure occurred.
8. Additional preventive measures taken or contemplated to minimize the possibility of recurrence.
9. Such other information as the Regional Administrator may reasonably require pertinent to the Plan or spill event.

A.2 VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ)

Oil spills are reported and handled in accordance with the Virginia Oil Discharge Contingency Plan (ODCP) requirements. The Virginia ODCP requirements are more stringent than the federal rules relating to oil spills. Notification of a reportable spill must be made immediately to the VDEQ (normal hours: 0500-2100) or VDEM (if the spill occurs after hours or on the weekend). A "reportable" spill is:

- Any spill equal to or greater than 25 gallons.
- Any spill regardless of amount that causes a sheen on surface waters.
- Any oil spill less than 25 gallons that cannot be cleaned up within 24 hours.

Releases of hazardous materials or hazardous waste that poses an immediate or imminent threat to public health must also be reported (9 VAC 20-60-264(B)(31)(d)).

Notifications to the Virginia Emergency Operations Center are to be made immediately by contacting **800-468-8892** or **804-674-2400** (24 hours). Prior to JBLE-Eustis FES contacting the National Response Center (NRC), USEPA, and VDEQ regarding a reportable spill, the following information should be collected:

- Address and telephone number of the installation,
- Spill date and time,
- Type of oil product spilled,
- Location of spill,
- Weather conditions at the spill location,
- Estimate of the total quantity spilled,
- Estimate of the quantity spilled into navigable water,
- Source of the spill,
- Description of the affected media (water, air, land),
- Cause of the spill,
- Damages or injuries caused by the spill,
- Actions used to stop, remove, and mitigate the effects of the spill,
- Whether an evacuation is needed, and
- Names of individuals or agencies that have also been contacted.

Note: Not having all or complete information will not prevent a person from making the appropriate immediate notification.

Further information concerning VDEQ requirements for reporting releases can be found in the VDEQ Storage Tank Program Technical Manual at: http://www.deq.virginia.gov/Portals/0/DEQ/Land/Tanks/012024dappendices.pdf

A Release Investigation Report may be required by the VDEQ to investigate a suspected release. An Initial Abatement and/or Site Characterization may be required by the VDEQ to investigate a confirmed release. When a suspected or confirmed release has been reported, the VDEQ will send a letter to the installation outlining the requirements for any investigation and will furnish a due date for the Release Investigation, Initial Abatement and/or Site Characterization Report.

APPENDIX B
SPILL REPORT FORM

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SPILL REPORT FORM FILL OUT FORM COMPLETELY	
CONTACT INFORMATION	
Installation:	
Reporting POC:	
Reporting Activity:	
Telephone:	Extension:
Responsible Activity: Responsible POC: Telephone: Bldg #: DODDAC:	(use abbreviation) Extension:
SPILL INFORMATION	
Date of spill/release:	(mm/dd/yyyy)
Time of spill/release:	hours (HH:mm)
Location of spill/release (specify closest building number):	
Type of material spilled/released:	If other, describe:
Container type and capacity:	
Cause of spill/release:	If other, describe:
Description of spill/release (include pathway):	
Estimated amount spilled/released:	gallons
Was contractor support necessary?	If Yes: hours of support

Has spill/release entered storm drains, ditches, wetlands, or surface water?	If Yes: 1. Estimated amount entering water source: gallons 2. Receiving water source: If other, describe: 3. Sheen/discoloration dimensions: feet by feet
CORRECTIVE ACTIONS	
Immediate corrective action taken:	Date completed: (mm/dd/yyyy)
Long-term corrective actions planned:	Date completed: (mm/dd/yyyy)
Describe plans developed to prevent recurrence:	
Additional information:	
REPORTABLE STATUS	
Is the spill reportable?	
Was a report submitted?	If yes, complete reporting table below.

REPORTING TABLE

Agency (check if report submitted)		Date (mm/dd/yyyy)	Agency POC	Report # (if applicable)
National Response Center (800-424-8802)	☐			
Virginia Department of Environment Quality (757-518-2077)	☐			No need to call if NRC is called. NRC notifies VEMS, who will notify VDEQ
U.S. Coast Guard (757-668-5555)	☐			N/A
Virginia Emergency Operations Center (800-468-8892 or 804-674-2400)	☐			

Forward this spill report form to the Environmental Element - No later than the next working day: Civil Engineer Squadron (CES), Building 1407, POC: Mr. Paul James, Phone: 757-878-7362, Cell 757-644-7411, E-mail: paul.a.james8.civ@mail.mil, Fax 757-878-4589

Peninsula Local Emergency Planning Committee* (757-565-7617)	☐			
HEPACO **BPA # FA4800-11-A-0037** Responsible Person must contact finance or contracting before contacting HEPACO	☐		**633rd Contracting Office** (757) 764 – 2544	**Person contacted at Contracting** See authorized call list memorandum
ACCURATE MARINE # FA4800-11-A-0002 primarily POL response Responsible Person must contact finance or contracting before contacting Accurate Marine	☐		**633rd Contracting Office** (757) 764 –2544	**Person contacted at Contracting** See authorized call list memorandum

Impact	
Number of injuries:	
Number of deaths:	
Were there any evacuations?	If yes, number evacuated:
Was there any damage?	If yes, estimate dollars:
Medium affected and description:	
Additional information:	

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APPENDIX C
ACRONYMS AND ABBREVIATIONS

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ACRONYMS AND ABBREVIATIONS

AAFES	Army and Air Force Exchange Service
AATD	Aviation Applied Technology Division
ACP	Area Contingency Plan
AEM	Advanced Environmental Management
AFCEC	Air Force Civil Engineer Center
AFI	Air Force Instruction
AFVO	animal fat and vegetable oil
AST	aboveground storage tank
ASUS	American States Utility Services
ATSC	Army Support Training Center
bbl	barrels
BEMA	Base Environmental Management Awareness
Bldg.	Building
BPA	Blanket Purchase Agreement
CED	Civil Engineering Division
CEIE	Installation (Management) Environmental
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CES	Civil Engineer Squadron
CFR	Code of Federal Regulations
COTP	Captain of the Port
CWA	Clean Water Act
DGIF	Department of Game and Inland Fisheries
DLA	Defense Logistics Agency
DoD	Department of Defense
DOIM	Director of Information Management
DOL	Directorate of Logistics
DPTMSEC	Directorate of Plans, Training, Mobilization and Security
DPW	Directorate of Public Works
DW	double-walled
EE	Environmental Element
EOC	Emergency Operations Center
FES	Fire and Emergency Services
FRP	Facility Response Plan
FRT	Facility Response Team
FSC	Finance Section Chief
ft	feet
FWS	Fish and Wildlife Service
gal	gallons

GIUE	Government Initiated Unannounced Exercise
gpm	gallons per minute
GSA	General Services Administration
HAZWOPER	Hazardous Waste Operations and Response
hr	hour
HRSD	Hampton Roads Sanitation District
HQ	Headquarters
HWAF	Hazardous Waste Accumulation Facility
HWMP	Hazardous Waste Management Plan
IAW	in accordance with
IC	Incident Commander
ICP	Integrated Contingency Plan
ICS	Incident Command System
ICRMP	Installation Cultural Resources Management Plan
INRMP	Installation Natural Resources Management Plan
IPac	Information for Planning and Conservation
JBLE	Joint Base Langley Eustis
LEMAC	Leadership Environmental Management Awareness and Competency
LEPC	Local Emergency Planning Committee
MARAD	Maritime Administration
MEDDAC	Medical and Dental Administration
MSG	Mission Support Group
MTR	Marine Transportation-Related
NAICS	North American Industry Classification System
NCO	Non-Commissioned Officer
NIIMS	National Interagency Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRS	National Response System
NRT	National Response Team
ODCP	Oil Discharge Contingency Plan
ODUS	Old Dominion Utility Service
OOS	out-of-service
OPA	Oil Pollution Act
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OSRO	Oil spill response organization
PCB	polychlorinated biphenyls
POL	petroleum, oils, and lubricants

PPE	personal protective equipment
PREP	Preparedness for Response Exercise Program
QI	Qualified Individual
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantity
SARA	Superfund Amendments and Reauthorization Act
SCAT	self-contained aboveground tank
SDS	Safety Data Sheet
SERC	State Emergency Response Commission
SIC	Standard Industrial Classification
SMT	Spill Management Team
SOP	Standard Operating Procedure
SPCC	Spill Prevention Control and Countermeasures
SW	single-walled
TBD	to be determined
TEACH	The Environmental Awareness Course Hub
TRADOC	Training Doctrine Command
TSE	Training Support Enterprise
TLI	tank level indicator
TVRP	Tactical Vehicle Refueling Point
U.S.	United States
USACHPPM	United States Army Center for Health Promotion and Preventative Medicine
USCG	United States Coast Guard
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	underground storage tank
VAC	Virginia Administrative Code
VAFWIS	Virginia Department of Game and Inland Fisheries Virginia Fish and Wildlife Information
VDCR	Virginia Department of Conservation and Recreation
VDEM	Virginia Department of Emergency Management
VDEQ	Virginia Department of Environmental Quality
WCD	Worse Case Discharge

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JBLE-EUSTIS ICP ANNEXES

TABLE OF CONTENTS

Figures

Tables

Attachments

Annex 1. Facility and Locality Information

Information critical to emergency response can be found in this Annex. This Annex includes *information on the layout of the facility and the surrounding environment as well* as location of discharge sources, nearby environmentally sensitive resources, and human populations.

1.1 Facility Maps[1]

The following maps are included in **Attachment 1A**:

- Map 1. Installation Location Map
- Map 2. United States Geological Survey (USGS) Topographic Map
- Map 3. Installation Layout[2]
- Map 4. JBLE-Eustis Groundwater Withdrawal Wells[3]
- Map 5. Tactical Vehicle Refueling Point Layout (Mechanical Site Plan)
- Map 6. Felker Army Airfield Jet A Fuel Terminal Layout (new terminal) (Mechanical Site Plan)

The following area maps are included in **Attachment 1B**:

- National Wetlands Inventory – James River Area
- National Wetlands Inventory – JBLE-Eustis Area
- James River Area Recreational Use Map
- James River Navigational Chart

1.2 Facility Description/Layout

1.2.1 Current Usage and Layout[4]

JBLE-Eustis is a federal military reservation contiguous to Newport News, Virginia, and occupies approximately 8,000 acres (12.9 square miles). It is an active military installation facility, supporting both peacetime and wartime missions, which houses a variety of military organizations, non-DoD tenants, and support and recreational activities as well as military personnel and their dependents.

JBLE-Eustis is now the United States DoD training center for officers and soldiers with transportation-related disciplines. The military reservation is located 11 miles southeast of Williamsburg, Virginia, and approximately 43 miles northwest of Norfolk, Virginia. The geographic coordinates of the main gate to JBLE-Eustis are 37° 10’ 12” North latitude, 76° 34’ 30” West longitude. Primary access to the installation is gained from exiting Interstate 64 at State Road 105 (Exit #250) and traveling southwest for approximately 1.5 miles to the main entrance traffic security point.

Access can also be gained from U.S. Highway 60, which parallels Interstate 64 to the south. The military reservation boundaries encompass 8,228 acres and border on the confluence of Skiffes Creek and the James River to the south. The installation may be entered 24 hours a day, but drivers of vehicles without identification tags are required to stop and secure permission to enter between 10:00 p.m. and 5:30 a.m. JBLE-Eustis is accessible by the CSX Railroad, which ties in to a

[1] 33 CFR 154.1035 (b)(4)(ii)
[2] 40 CFR Part 112 Appendix F 1.9
[3] 40 CFR Part 112 Appendix F 1.2.1
[4] 40 CFR Part 112 Appendix F 1.2.7; 33 CFR §154.1035(e)(1)

military railroad system on the installation. A military port facility (Third Port) located on the Skiffes Creek and James River confluence allows large military assault landing ships, equipment supply barges, and tugboats to dock and train personnel in procedures for loading or off-loading military cargo.

Approximately 16,900 military (Army, Air Force, Navy, and Marines), Coast Guard, civilian personnel, and military dependents work and live on the installation with approximately 4,200 military members and their dependents residing on the installation 24-hours daily. The installation also provides support to an estimated 59,048 active duty family members and retirees and family members. Support activities included on the installation consist of a child development center, health clinic, dental clinic, elementary school, bowling alley, gymnasiums, aquatic center, commissary, post exchange, and recreational facilities.

JBLE-Eustis is the home of the Headquarters (HQ) United States (U.S.) Army Training and Doctrine Command (TRADOC), the Army Training Support Center (ATSC), and the 7th Transportation Brigade (Expeditionary). TRADOC is responsible for developing, educating, and training soldiers and civilians; supporting unit training; and designing, building, and integrating capabilities, formations, and equipment. The ATSC, based at JBLE–Eustis, is responsible for managing the Army Training Support Enterprise (TSE), which provides oversight for programs that enable development, delivery, and sustainment of training and education support capabilities. The 7th Transportation Brigade (Expeditionary) provides logistics support around the world for port, terminal, and watercraft units conducting expeditionary operations in support of land operations. Other units on JBLE-Eustis include the Army Aviation Logistics School, Non-commissioned Officer's (NCO) Academy, Aviation Applied Technology Directorate (AATD), and the James River Reserve Fleet.

Industrial activities on the installation include motor pools; vessel, aviation, and vehicle maintenance facilities and washing operations; a fuel terminal on Felker Army Airfield; and a pretreatment facility in the Third Port Area.

Information critical to the response, such as the location of discharge sources, and response equipment, are contained in the Spill Prevention, Control, and Countermeasures (SPCC) Plan. The SPCC Plan is located in **Annex 9**. Installation descriptions and specific corrective actions are also contained in the SPCC Plan. Valves that can be shut in the event of an emergency are shown on the piping diagrams in **Annex 3 Attachment 3D**.

1.2.2 Installation History[5]

A detailed installation history can be found on the JBLE web site (https://www.jble.af.mil/About-Us/Fort-Eustis-History/) and in the Installation Cultural Resources Management Plan (ICRMP). Dates relating to major milestones related to oil usage are summarized below:

- The installation was first used as a federal installation as Camp Eustis in 1918.
- In 1946, Fort Eustis became home to the Transportation Corps and School. To supplement the rail and motor training facilities at Fort Eustis, a major port facility was constructed in 1946.
- Felker Heliport (now Felker Army Airfield) opened in December 1954.
- Fuel barge operations ceased at Third Port in 2017.

[5] 40 CFR Part 112 Appendix F 1.2.6; 40 CFR Part 112 Appendix F 1.2.8

- The Felker Army Airfield fuel terminal is expected to be closed and demolished in 2021/2022. An upgraded Felker Army Airfield fuel terminal is being constructed in 2020/2021 (construction not complete as of 1 June 2021).

Although tank data is incomplete, the oldest tanks at the installation were installed in 1995.

1.3 Vulnerable Resources and Populations

One means of identifying vulnerable resources is quantifying the distance to potentially affected resources. USEPA's primary concern for vulnerable resources is the movement of oil in navigable waters during adverse weather conditions.

Potentially affected natural resources were considered under the provisions of 40 CFR 112, Appendix C, Attachment C-III - Calculation of the Planning Distance, 4.0 Oil Transport on Tidal-Influence Areas. JBLE-Eustis applies the 15-mile tidally influenced radius (per 40 CFR Part 112, Appendix C, Attachment C-III) for potentially affected resources located in the vicinity of the installation. A summary of potentially affected environments in the event of a worst case spill at JBLE-Eustis is provided in the sections below.

A large oil spill from a vessel could impact the environments of the tidal reaches of Skiffes Creek and the James River which it empties into (**Figure 2**). A large fire involving petroleum could release smoke pollution that could reach nearby commercial and private properties.

1.3.1 Installation Populations

The majority of tanks are located in industrial areas or in areas not routinely used by the general base population. The population vulnerable to a spill at JBLE-Eustis would be limited to workers near the spill site and in the direct path of the spill. The Military Police will assist in evacuating persons from the projected impact of a spill.

1.3.2 Installation Natural Resources

Natural resource areas on or adjacent to JBLE-Eustis that could be impacted as the result of a spill include the following:

- Mulberry Island - Mulberry Island contains estuarine and marine wetlands, freshwater emergent wetlands, and freshwater forested/shrub wetlands.
- Warwick River - The Warwick River contains estuarine and marine wetlands upstream from Thorofare Island.
- Eustis Lake - Contains freshwater emergent wetlands, and freshwater forested/shrub wetlands.
- Skiffes Creek - Skiffes Creek contains riverine, estuarine, and marine wetlands.
- Blows Creek - Blows Creek contains estuarine and marine wetlands.

A National Wetlands Inventory Map of the JBLE-Eustis area is included in **Attachment 1B**. Refer to the most current Installation Natural Resources Management Plan (INRMP) for threatened and endangered species that may be found at JBLE-Eustis.

1.3.3 Off-site Populations

Based on the commercial, institutional, industrial, and recreational uses of the James River and the Chesapeake Bay (including the surrounding populations), an uncontrolled off-site spill that reaches these waterways has the potential for direct impact on human populations. Populations within the 15-mile tidally influenced radius include:

- Newport News, Virginia (approximately 180,000 residents)

- Hampton, Virginia (approximately 137,000 residents)

1.3.4 Off-site Natural Resources

Natural resources potentially impacted by a spill that extends off-site include:

Natural Resources (0-5 miles)

- **Hog Island Creek** (Surry County, Virginia) - contains freshwater emergent wetlands, and freshwater forested/shrub wetlands, estuarine and marine wetlands, and estuarine and marine deepwater wetlands, endangered terns, and endangered raptors.
- **Lawnes Creek** (Surry and Wight Counties, Virginia) - Lawnes Creek contains freshwater emergent wetlands, and freshwater forested/shrub wetlands, and estuarine and marine wetlands.
- **Hog Point** (James River, Virginia) - contains estuarine and marine wetland and freshwater forested/shrub wetland and endangered terns. It is also designated as Hog Island Wildlife Management Area.
- **Passamore Creek** (James City County, Virginia) - Passamore Creek drains Jamestown Island to the James River. It contains freshwater emergent wetlands and freshwater forested/shrub wetlands and is a habitat for bald eagles, great blue heron, and egret rookeries, and least bittern. This area includes the Colonial National Historical Park.
- **Thorofare/Sandy Bay/Back River** (Jamestown, Virginia) - The Thorofare/Sandy Bay/Back River area contains freshwater emergent wetlands, and freshwater forested/shrub wetlands. It also includes the Colonial National Historical Park and Jamestown settlement.
- **Pagan River** (Smithfield, Virginia) - Contains estuarine and marine wetlands.
- **Swann's Point** (Surry County, Virginia) - Contains freshwater emergent wetlands and freshwater forested/shrub wetlands. It also is habitat to bald eagles and great blue heron rookeries. This area is managed by the National Park Service as part of the Colonial National Historic Park.

Natural Resources (5-15 miles)

- **Jones Creek** (Martinsville, Virginia) - contains estuarine and marine wetlands.
- **Cypress Creek** (Smithfield, Virginia) - contains estuarine and marine wetlands.
- **Grays Creek** (Surry, Virginia) - contains freshwater emergent wetlands.
- **College Creek** (Jamestown, Virginia) - contains freshwater emergent wetlands.
- **Lower Chippokes Creek** (Surry, Virginia) - contains freshwater emergent wetlands and freshwater forested/shrub wetlands.
- **Powhatan Creek** (Williamsburg, Virginia) - contains freshwater emergent wetlands and freshwater forested/shrub wetlands.
- **Deep Creek** (Newport News, Virginia) - contains estuarine and marine wetlands.
- **James River** (Multiple Locations) - contains estuarine and marine wetlands.

Natural resource locations were identified on the Virginia Department of Conservation and Recreation's (VDCR) Natural Heritage Resource database. A National Wetlands Inventory Map of the James River area in the vicinity of JBLE-Eustis is included in **Attachment 1B**.

The Fish and Wildlife Service (FWS) Information for Planning and Conservation (IPac) can identify the threatened and endangered species in the vicinity of JBLE-Eustis. Migratory birds that are protected under the Migratory Bird Treaty Act pass through the area. A list of migratory

birds protected by the Migratory Bird Treaty Act and the seasons when they may be present are also identified by the FWS IPaC. Refer to https://ecos.fws.gov/ipac/ for current lists.

GIS layers for State-listed rare, threatened, and/or endangered species for a specific area can be accessed through the Virginia Department of Game and Inland Fisheries (DGIF) Wildlife Environmental Review Map Service (https://dwr.virginia.gov/gis/werms/).

1.4 Identification of Facility Hazards

Accurately forecasting oil spills is difficult because it involves estimating the probability of randomly occurring incidents, equipment failures, and human errors. Predicting the spill rate from a damaged tank or pipeline depends on factors such as tank or line size, line pressure, the flow rate at the time of failure, the size of the tank or pipeline defect, the volatility of the oil, and the surface or subsurface area available into which the leak could spread. Information pertaining to predicting the direction of, rate of flow, and total quantity of oil that could be discharged from various types of tanks is addressed in **Annex 3 Attachment 3H**.

Previous spill events at the facility are summarized in **Annex 4**. Reportable spills are documented in written spill reports, the cause of the spill is evaluated, and the means of preventing reoccurring spills are discussed and acted upon. Worst case discharge scenario calculations and discussions are addressed in **Annex 3 Attachment 3F**.

Oil storage and transfer areas present risks of releases and facility hazards. The general oil storage and transfer areas are described in **Annex 1 Sections 1.4.1, 1.4.2, and 1.4.3** below.

1.4.1 Primary Aboveground Oil Storage Areas[6]

The majority of JBLE-Eustis' bulk storage petroleum products are stored in double-walled aboveground storage tanks (ASTs). JBLE-Eustis stores portable containers (e.g., 55-gallon drums) either inside buildings or within secondary containment structures. JBLE-Eustis does not have any fixed bulk ASTs (without secondary containment) located within undiked areas, except the following containers:

- Tank 460-6, 300-gallon diesel day tank inside Building 460
- Tank 589-1, 300-gallon diesel fire suppression system tank, inside fire pump room (Building 589)
- Tank 677-1, 250-gallon animal fat and vegetable oil (AFVO) container (outside)
- Tank 2115, 190-gallon hydraulic oil chamber (inside, for elevator)
- Tank 662-2, 130-gallon hydraulic oil chamber (inside, for elevator)

Bulk oil storage at JBLE-Eustis is located in four primary bulk storage areas: Third Port Area, Felker Fuel Terminal, James River Reserve, and Tactical Vehicle Refueling Point (TVRP). Each area contains ASTs located in diked storage areas used for oil containment. The secondary containment provided for these ASTs is sufficient for the largest AST and freeboard. Manual-type drain valves control the drainage of accumulated rainwater and are opened only after the accumulated water has been inspected for the presence of oil by trained personnel. Accumulated rainwater is not released if it shows signs of contamination.

JBLE-Eustis has many small diesel fueled generators located throughout the installation. Although each generator tank is not used much beyond periodic testing and occasional emergency use, the

[6] 40 CFR Part 112 Appendix F 1.4.1

number of generator tanks make them a risk factor to be considered. The various types of diesel generator systems are also described in this Annex.

The AST inventory for JBLE-Eustis was updated using the SPCC Plan (June 2020). The SPCC Plan lists approximately 163 ASTs located throughout the installation; another 6 tanks are expected to be turned over the Government after 1 June 2021. The updated AST inventory is provided in **Table A1-1** below. A summary of portable containers and mobile storage tanks is provided in **Table A1-2** below. An inventory of oil storage tanks containers are provided in **Appendix 1C**; an inventory of other oil container storage areas is provided in the SPCC Plan (**Annex 9**).[7]

Table A1-1. Summary of Aboveground Storage Tanks at JBLE-Eustis

Product Stored	Total ASTs	Total Capacity (Gal)
Used oil	27	12,132
Heating oil	9	4,500
Gasoline	9	9,112
Diesel/Jet-A/Motor Oil	30	136,120
Generators w/diesel fuel	51	57,795
Generators w/diesel fuel (operated by American States Utility Service [ASUS])	13	1,990
Elevator Hydraulic Tanks	17	2,471
AFVO	13	3,244
Totals for ASTs	**169**	**227,364**
Totals include tanks at the TVRP and Felker Army Airfield under construction in 2021 that have not yet been turned over to the Government as of 1 June 2021.		

Table A1-2. Summary of Portable Containers and Mobile Storage Tanks at JBLE-Eustis

Container and Mobile Storage	Total	Total Capacity (Gal)
Mobile Fuel Tanks	25	27,000
Portable Container Storage	304	16,810
Total Container and Mobile Storage	**329**	**43,810**

1.4.1.1 Felker Army Airfield Fuel Terminal

The Fuel Terminal provides fuel support to military aviation organizations operating at Felker Army Airfield. The Felker Army Airfield Fuel Terminal is in transition as of 1 June 2021. The terminal is transitioning from an older terminal (with two 30,000-gallon ASTs) to a new terminal (with two 20,000-gallon ASTs and one 1,000-gallon AST) located approximately 400 feet west. Once the new terminal has been commissioned, the old terminal will be decommissioned and is expected to be demolished.

[7] 40 CFR Part 112 Appendix F 1.3.5

Two 5,000-gallon mobile refuelers and one 2,000-gallon mobile refueler are used for aircraft refueling activities on Felker Army Airfield. The mobile refuelers are parked at the Fuel Terminal when not in use at the airfield.

The Aviation Supply Office oversees aircraft refueling activities at the airfield and manages fuel operations through a fuel systems foreman. The fuel systems foreman manages the daily operations at the fuel terminal and supervises subordinate tank truck drivers in the performance of aircraft refueling tasks.

Old Fuel Terminal

The older Fuel Terminal is located at the intersection of Mulberry Island Road and Condon Road, in the northeast portion of Felker Army Airfield. The closest building to the Jet Fuel F-24 Terminal is Building 2451.

The ASTs at the Fuel Terminal and the type of secondary containment for each AST are listed in **Table A1-3** and shown in **Figure 8** (**Annex 1**). **Photo 1** shows the two 30,000-gallon ASTs at the old Fuel Terminal. A system schematic is provided in **Annex 3 Attachment 3D**.

Two tank truck loading/loading pads at the old Fuel Terminal are used for receiving fuel into the tanks and for issuing fuel to mobile refuelers. The two 4-inch curbed tank truck loading/unloading pads are located within the fenced enclosure at the Fuel Terminal. Each pad has two drains that gravity feed to the westernmost concrete-bermed secondary containment. This containment has a capture capacity of approximately 64,500 gallons, more than sufficient to contain the entire contents of a ruptured 30,000-gallon AST and/or the largest capacity mobile refueler (5,000 gallons).

New Fuel Terminal

A new Fuel Terminal is under construction (as of 1 June 2021) along Condon Road, approximately 400 feet west of the existing terminal. The new system includes two 20,000-gallon jet fuel F-24 tanks, one 1,000-gallon Jet A product recovery tank, a tank truck offloading station, and two mobile refueler loading stations.

The ASTs at the new Fuel Terminal and the type of secondary containment for each AST are listed in **Table A1-3** and shown in **Figure 8 (Annex 1). Photograph 2** shows the tanks at the new terminal. A system schematic is provided in **Annex 3 Attachment 3D**. A Mechanical Site Plan of the new terminal is included in **Annex 1 Attachment 1A Map 4.**

The design documentation indicates that the new tanks will be equipped with an automatic tank gauging system and interstitial leak detection system. The tank gauging system will:

- Sound a visual and audible alarm at the low level
- Stop the issue pump and sound a visual and audible alarm at the low-low level
- Sound a visual and audible alarm at the high level
- Stop the offload pump and sound a visual and audible alarm at the high-high level

According to the Design Analysis (Austin Brockenbrough, 19 February 2019, Contract No. W9128F-12-D-0006), fuel spills and stormwater in impervious surface areas will be routed through a trench drain, area inlets, and piping to a remote containment. Clean stormwater will be discharged by a submersible pump onto a concrete trough and returned to sheet flow leaving the site.

The site spill containment is composed of two drainage networks and one spill basin. The 20-foot by 20-foot by 3.04-foot deep concrete basin and associated ductile iron piping below the lowest

contributing inlet grate is designed to hold 100 percent of a 10,000-gallon over-the-road tank truck spill. A fuel spill at the off-load/fillstand area will be detained by a network composed of two trench drains and ductile iron piping routed to the spill basin. A fuel spill at the tank truck parking area will be detained by a network composed of five area inlets and ductile iron piping routed to the spill basin.

Table A1-3. Aboveground Bulk Storage Tanks and Mobile Refuelers Located at Felker Army Airfield Fuel Terminals

Tank ID	Location Bldg.	Capacity (gallons)	Contents	Secondary Containment
2451-1[a]	2451	30,000	Jet-A (F-24)	Concrete secondary containment
2451-2[a]	2451	30,000	Jet-A (F-24)	Concrete secondary containment
2451-3[a]	2451	250	Jet A (F-24)	Double-walled tank
2451-6[b]	2451	20,000	Jet A (F-24)	Double-walled tank
2451-7[b]	2451	20,000	Jet A (F-24)	Double-walled tank
2451-8[b]	2451	1,000	Jet A (F-24)	Double-walled tank
TT1	2451	5,000	Jet-A (F-24)	Spill containment pad
TT2	2451	5,000	Jet-A (F-24)	Spill containment pad
TT3	Airfield	2,000	Jet-A (F-24)	Spill containment pad

TT - Tank Truck (mobile refueler)

[a] Tanks 2451-1, 2451-2, 2451-3 are expected to be removed after the new terminal has been turned over to the Government.

[b] Tanks 2451-6, 2451-7, and 2451-8 are expected to be turned over to the Government after 1 June 2021.

Photograph 1. Felker Army Airfield Fuel Terminal 30,000-Gallon Jet Fuel F-24 ASTs

Photograph 2. New Felker Army Airfield Jet Fuel F-24 ASTs

1.4.1.2 James River Reserve Fleet

The James River Reserve Fleet is located on Mulberry Point at the southern end of Harrison Road. The James River Reserve Fleet is owned and operated by the United States Department of Transportation (USDOT) MARAD group. The mission of the James River Reserve Fleet is to maintain custody of several merchant and military vessels. Responsibilities include maintenance, security, preservation, and accountability of the vessels moored in this location.

JBLE-Eustis is not responsible for, nor does it have control of the fleet vessels moored in the James River. These vessels are not part of JBLE-Eustis and are outside the jurisdiction of JBLE-Eustis authorities. MARAD is solely responsible for spills originating from or caused by the moored vessels in the James River. MARAD performs response and cleanup actions, including notification of federal, state, and local authorities in the event of an incident arising from the moored vessels. MARAD will contact the JBLE-Eustis FES for support involving land-based spills or spills on the shoreline immediately adjacent to the property leased from JBLE-Eustis.

The ASTs located at the James River Reserve Fleet oil storage area and the types of secondary containment for each AST are listed in **Table A1-4**. A map showing the locations of the James River Reserve Fleet ASTs is provided in **Figure 4** of the SPCC Plan**.** The SPCC Plan is provided

in **Annex 9**. **Photographs 3 through 6** show used oil ASTs and self-contained aboveground tanks (SCAT) located at the James River Reserve.

Table A1-4. Aboveground Bulk Storage Tanks Located at James River Reserve Area

Bldg. No.	Tank No.	Capacity (gallons)	Contents	Secondary Containment
2606	2606-1	500	Diesel	Double-walled tank and concrete dike with drain
2606	2606-2	250	Gasoline	Double-walled tank and concrete dike with drain
2606	2606-3	275	Used oil	Double-walled tank and concrete dike with drain
2606	2606-4	275	Used oil	Double-walled tank and concrete dike with drain
2606	2606-5	275	Used oil	Double-walled tank and concrete dike with drain
2606	2606-6	275	Used oil	Double-walled tank and concrete dike with drain
2606	2606-7	500	Used oil	Double-walled tank and concrete dike with drain
2606	2606-8	500	Used oil	Double-walled tank and concrete dike with drain
2612	2612-1	612	Diesel fuel	Double-walled tank

Photograph 3. James River Reserve Area 500-Gallon Diesel AST (2606-1)

Photograph 4. James River Reserve Area 250-Gallon Gasoline AST (2606-2)

Photograph 5. James River Reserve Area Typical 275-Gallon Used Oil AST (2606-3, 2606-4, 2606-5, and 2606-6)

Photograph 6. James River Reserve Area 500-Gallon Used Oil ASTs (2606-7 and 2606-8)

1.4.1.3 Tactical Vehicle Refueling Point

The TVRP is located on the east side of Washington Blvd. near the intersection of Washington Blvd. and Schulz Ave. The TVRP was constructed in 2020/2021, but has not been turned over to the Government as of 1 June 2021. The new system includes one 12,000-gallon jet fuel F-24 AST, one 12,000-gallon diesel AST, one 6,000-gallon gasoline AST, a tank truck offloading station, and fuel dispensers.

The ASTs at the new TVRP and the type of secondary containment for each AST are listed in **Table A1-5.** A Mechanical Site Plan of the TVRP is included in **Annex 1 Attachment 1A Map 4.** A map showing the locations of the TVRP ASTs is provided in **Figure 10** of the SPCC Plan (**Annex 9)**. **Photograph 7** shows the tanks at the new TVRP.

The design documentation indicates that the new tanks will be equipped with an automatic tank gauging system and interstitial leak detection system. The tank gauging system will:

- Sound a visual and audible alarm at the low level
- Sound a visual and audible alarm at the high level

According to the Design Analysis (Austin Brockenbrough, 19 February 2019, Contract No. W9128F-12-D-0006), fuel spills and stormwater in the tank truck offloading area, dispenser area, and tank area will be routed through trench drains and piping to a remote concrete containment (estimated 13,000-gallon capacity based on construction diagrams). Clean stormwater will be discharged to the surface.

Table A1-5. Aboveground Bulk Storage Tanks at the TVRP

Tank ID	Location Bldg.	Capacity (gallons)	Contents	Secondary Containment
2734-7 [a]	Bldg 2734	12,000	Jet A (F-24)	Double-walled tank
2734-8 [a]	Bldg 2734	12,000	Diesel	Double-walled tank
2734-9 [a]	Bldg 2734	6,000	Gasoline	Double-walled tank
[a] The tanks are expected to be turned over to the Government in 2021.				

Photograph 7. TVRP Jet Fuel F-24, Diesel, and Gasoline ASTs

1.4.1.4 Third Port Area

The Third Port Area lies near the confluence of Skiffes Creek and the James River. It is located north of Kerr Road at the western end of Lee Boulevard. Oily wastewater is processed through the Third Port Pretreatment Facility. AST locations at the Third Port Area are shown on **Annex 1 Map 3**.

The Third Port Area's Pretreatment Facility (Pretreatment Facility) is used to treat bilge water and oily wastewater from ship vessels. The Pretreatment Facility consists of a 30,000-gallon wastewater equalization AST and a 10,000-gallon oily bilge wastewater AST. The capacity of the 30,000-gallon wastewater equalization AST and the 10,000-gallon oily bilge AST do not count

toward the overall storage capacity. This is based on 40 CFR §112.1(d)(6), which excludes any facility, or part thereof, used exclusively for wastewater treatment and not used to satisfy any requirement of the SPCC Rule. Additionally, the Pretreatment Facility is owned and operated by ASUS and is not considered to be part of the JBLE-Eustis facility.

The 10,000-gallon AST receives the oily wastewater from vessels and transfers the wastewater to the 30,000-gallon wastewater equalization tank where oil/water separation takes place. The wastewater is then pumped to a system where chemical addition, dissolved air flotation, and organo-clay absorption occurs. The separated effluent water is discharged into a sanitary sewer lift station near Building 410. The ASTs associated with the pretreatment process and oil recovery are currently owned and maintained by ASUS. The frequency of removal varies depending upon the operation of the pretreatment installation. The 10,000-gallon and 30,000-gallon ASTs have audible and visual high-level and leak warning alarms.

The Third Port and pier system are capable of transferring oily bilge water from any of the DoD vessels stationed at JBLE-Eustis. The largest oil capacity of the any of the vessel stationed at JBLE-Eustis is estimated to be 26,000 gallons. Up to three vessels (one on each side of the pier) may be connected to the bilge water piping at any one time, typically one vessel will transfer oily bilge water through the piping at any one time.[8] The jurisdictional valve that separates EPA's jurisdiction from USCG's jurisdiction is located within the concrete secondary containment surrounding the Third Port oily water system and tanks (operated by ASUS).[9]

Other ASTs located in the Third Port area are owned and operated by JBLE-Eustis and are included in the inventories covered in other sections of this Plan.

1.4.1.5 Generators

Numerous emergency backup generators are located throughout JBLE-Eustis. The majority of generators are small generator sets with sub-base tanks. Several generator sets are equipped with large sub-base tanks. Also, several generators are fueled by ASTs that are separate from the generator. **Photographs 8 through 10** depict the various types of generator tanks located at JBLE-Eustis. Locations of the generator ASTs are shown on figures in the SPCC Plan (**Annex 9**).

[8] 33 CFR §154.1035(e)(1)(ii)
[9] 33 CFR §154.1035(e)(1)(iii)

Photograph 8. Typical Small Emergency Generator with Integral Sub-Base Tank

Photograph 9. Typical Large Emergency Generator with Integral Sub-Base Tank

Photograph 10. Typical Emergency Generator with Separate Tank

1.4.2 Underground Storage Tanks

JBLE-Eustis has 28 USTs on base. 40 CFR Part 280, which regulates USTs, excludes tanks used for storing heating oil for consumptive use on the premises where stored. Therefore, seven of the 28 USTs are regulated under 40 CFR Part 280 (and similar state regulation); the remaining 21 USTs storing only heating oil are not regulated under 40 CFR Part 280.

40 CFR Part 112 exempts any heating oil storage container used solely at a single-family residence. Approximately 21 heating oil USTs at JBLE-Eustis do not serve single-family residences; therefore, these tanks are regulated under 40 CFR Part 112 and are included in the SPCC Plan. Single-family residences at JBLE-Eustis have been privatized; therefore any heating oil USTs associated with residences are owned and operated by the residential owner/operator.

1.4.3 Transfer Operations

JBLE-Eustis performs petroleum, oil, and lubricant (POL) transfer operations at the Felker Army Airfield Fuel Terminal, TVRP, Third Port Pretreatment Facility, and U.S. Maritime Administration's Mulberry Point facility (should mobilization of the Reserve Fleet assets be initiated). At the Felker Army Airfield Fuel Terminal, fuel (jet fuel F-24) is supplied to the large ASTs by tanker trucks. The fuel is then transferred from the ASTs to mobile refuelers to the Airfield where aircraft are refueled. Motor pools and other maintenance facilities are located throughout JBLE-Eustis that conduct petroleum transfer, albeit in smaller quantities.

ATTACHMENT 1A
FACILITY MAPS

- Map 1. Installation Location Map
- Map 2. USGS Topographic Map
- Map 3. Installation Layout
- Map 4. JBLE-Eustis Groundwater Withdrawal Wells
- Map 5. Tactical Vehicle Refueling Point Layout
- Map 6. Felker Army Airfield Jet A Fuel Terminal Layout (new terminal)

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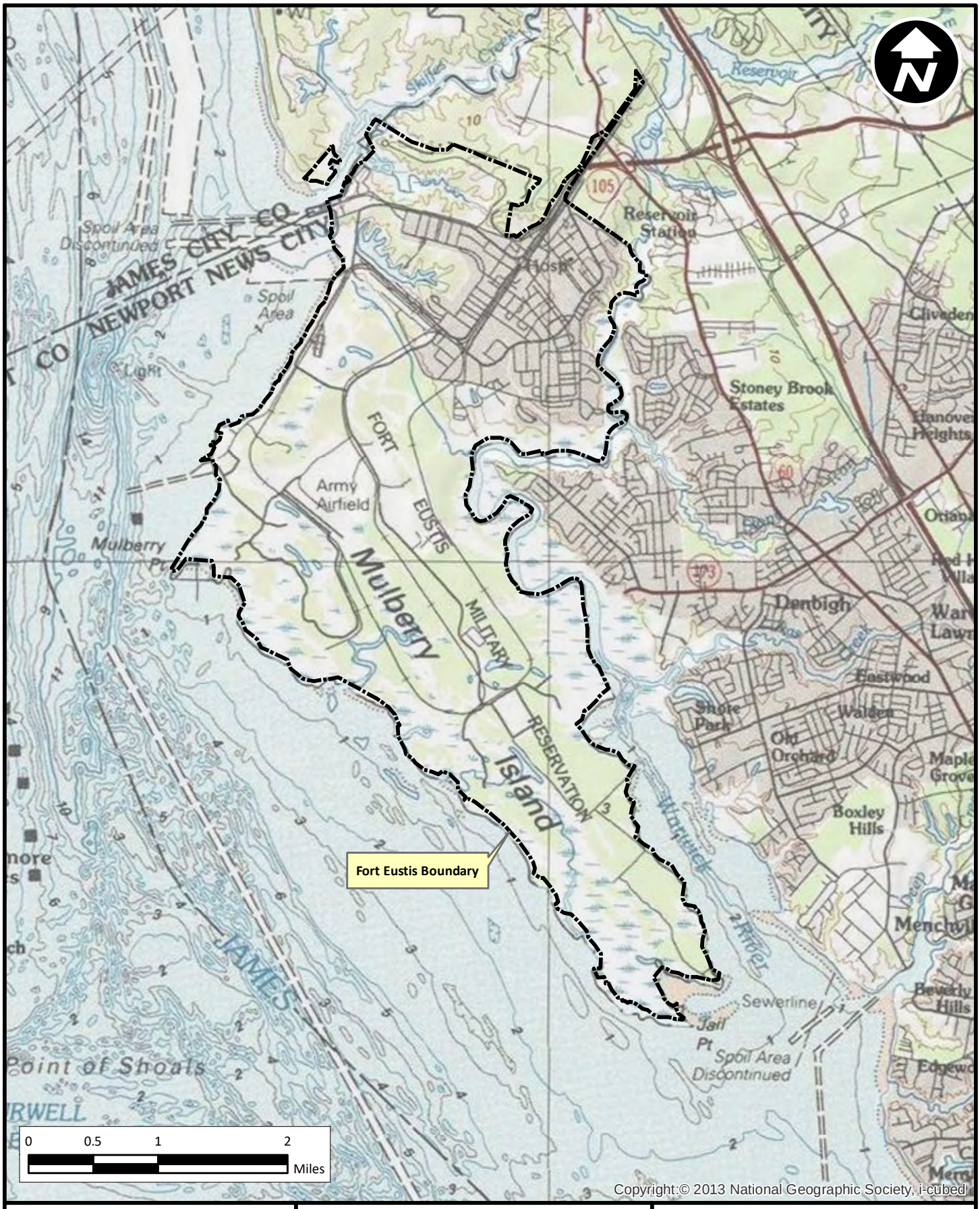
Integrated Contingency Plan
JBLE-Eustis

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCBPA2.0002.1002.0201	As Shown	12/14/2020	MRM

JBLE-Eustis
Installation Location Map

Map 1



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Integrated Contingency Plan
JBLE-Eustis

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCBPA2.0002.1002.0201	As Shown	12/14/2020	MRM

JBLE-Eustis
USGS Topographic Map

Map 2

Tank ID	Contents	Capacity (Gallons)
002-1	DIESEL FUEL	190
006-1	DIESEL FUEL	383
009-1	DIESEL FUEL	335
120-1 LS	DIESEL FUEL	253
121-1 LS	DIESEL FUEL	113
210-1	DIESEL FUEL	500
401-1	DIESEL FUEL	132
410-1	OILY WATER/ BILGE WATER	30,000
410-3	OILY WATER/ BILGE WATER	10,000
438-2	USED OIL	500
451-4	DIESEL FUEL	200
460-4	USED OIL	1,000
460-5	DIESEL FUEL	2,000
460-6	DIESEL FUEL	300
515-2	DIESEL FUEL	700
587-1	DIESEL FUEL	500
589-1	DIESEL FUEL	300
601-1	DIESEL FUEL	500
601-2	DIESEL FUEL	500
648-2	DIESEL FUEL	600
660-1	USED OIL	500
661-1	DIESEL FUEL	400
661-2	DIESEL FUEL	3,000
662-1	DIESEL FUEL	366
667-1	DIESEL FUEL	2,700
668-1	USED OIL	500
691-1	DIESEL FUEL	1,800
692-1	DIESEL FUEL	1,800
703-1	DIESEL FUEL	70
705-1	DIESEL FUEL	773
705-2	DIESEL FUEL	200
806-1	USED OIL	264
825-1	DIESEL FUEL	300
836-4	USED OIL	500
839-1	DIESEL FUEL	331
842-1 LS	DIESEL FUEL	120
843-1	HEATING OIL	500
843-2	GASOLINE	500
866-2	GASOLINE	500
886-1	USED OIL	500
886-2	USED OIL	500
890-1 AWS	DIESEL FUEL	378
900-1	DIESEL FUEL	129
950-1	DIESEL FUEL	12,000
950-2	DIESEL FUEL	12,000
1013-1	DIESEL FUEL	269
1013-2	DIESEL FUEL	500
1028-1	DIESEL FUEL	300
1034-1	DIESEL FUEL	675
1208-1	USED OIL	300
1209-1	DIESEL FUEL	500
1209-2	OFF-SPEC FUEL	500
1209-3	OFF-SPEC FUEL	500
1209-4	USED OIL	240
1382-1	DIESEL FUEL	449
1383-1	USED OIL	300
1383-2	MOTOR OIL	275
1383-3	MOTOR OIL	275
1387-1	DIESEL FUEL	1,400
1405-1	HEATING OIL	500
1406-1	DIESEL FUEL	330
1406-2	DIESEL FUEL	480
1406-3	DIESEL FUEL	160
1406-4	DIESEL FUEL	160
1406-5	DIESEL FUEL	270
1407-1	DIESEL FUEL	706
1408-1	DIESEL FUEL	600

Tank ID	Contents	Capacity (Gallons)
1410-2	DIESEL FUEL	305
1411-3	USED OIL	500
1413-1	DIESEL FUEL	396
1415-1	USED OIL	500
1416-1	DIESEL FUEL	180
1423-1	HEATING OIL	500
1423-2	DIESEL FUEL	500
1428-1A	DIESEL FUEL	250
1428-1B	GASOLINE	250
1503-1	DIESEL FUEL	600
1504-1	DIESEL FUEL	2,600
1605-1	DIESEL FUEL	80
1618-1 WT	DIESEL FUEL	60
1700-1	DIESEL FUEL	230
1754-1	DIESEL FUEL	500
1906-1 LS	DIESEL FUEL	150
2015-1	DIESEL FUEL	500
2023-1	DIESEL FUEL	150
2300-1	DIESEL FUEL	3,979
2401-1	DIESEL FUEL	200
2401-2 LS	DIESEL FUEL	113
2404-1	DIESEL FUEL	500
2404-2	DIESEL FUEL	500
2414-1	USED OIL	528
2417-1	DIESEL FUEL	600
2448-1	USED OIL	500
2451-1	JET A FUEL	30,000
2451-2	JET A FUEL	30,000
2451-3	JET A FUEL	500
2505-1	USED OIL	500
2505-2	USED OIL	400
2517-1	DIESEL FUEL	600
2606-1	DIESEL FUEL	500
2606-2	GASOLINE	250
2606-3	USED OIL	275
2606-4	USED OIL	275
2606-5	USED OIL	275
2606-7	USED OIL	500
2606-8	USED OIL	500
2612-1	DIESEL FUEL	612
2702-3	USED OIL	500
2713-1 LS	DIESEL FUEL	140
2717-1	DIESEL FUEL	600
2734-1	DIESEL FUEL	205
2743-1	USED OIL	500
2750-4	USED OIL	500
2750-5	USED OIL	500
2921-1 LS	DIESEL FUEL	253
3302-1	DIESEL FUEL	500
3302-2	GASOLINE	500
3303-1 LS	DIESEL FUEL	75
3305-1 LS	DIESEL FUEL	75
3506-1A	DIESEL FUEL	500
3506-1B	GASOLINE	500
3507-2	HEATING OIL	500
3509-2	HEATING OIL	500
3512-1 LS	DIESEL FUEL	110
3517-1	JET A FUEL	750
3520-1	GASOLINE	500
3523-1	HEATING OIL	500
3905-1	HEATING OIL	500
3910-1	HEATING OIL	500
3911-1	HEATING OIL	500
3941-1	DIESEL FUEL	500
3941-2	DIESEL FUEL	112
3941-3	GASOLINE	112
23RD/100 BLOCK LS	DIESEL FUEL	150
2451-6*	JET FUEL F-24	20,000
2451-7*	JET FUEL F-24	20,000
2451-8*	JET FUEL F-24	1,000
2734-7*	JET FUEL F-24	12,000
2734-8*	DIESEL FUEL	12,000
2734-9*	GASOLINE	6,000

Tank ID	Contents	Capacity (Gallons)
210-2	HYDRAULIC OIL	93
300-1	HYDRAULIC OIL	125
661-3	HYDRAULIC OIL	145
661-4	HYDRAULIC OIL	145
662-2	HYDRAULIC OIL	130
672-1	HYDRAULIC OIL	190
705-3	HYDRAULIC OIL	110
886-3	HYDRAULIC OIL	135
1012-1	HYDRAULIC OIL	108
1034-2	HYDRAULIC OIL	240
1504-2	HYDRAULIC OIL	160
1900-1	HYDRAULIC OIL	150
1900-2	HYDRAULIC OIL	150
2112-1	HYDRAULIC OIL	135
2115-1	HYDRAULIC OIL	190
2123-2	HYDRAULIC OIL	165
2421-1	HYDRAULIC OIL	100

Tank ID	Contents	Capacity (Gallons)
675-1	AFVO	250
677-1	AFVO	250
695-1	AFVO	250
695-2	AFVO	250
828-1	AFVO	250
950-3	AFVO	250
1328-1	AFVO	250
1382-2	AFVO	250
1386-1	AFVO	317
2123-1	AFVO	250
2300-2	AFVO	317
3518-1	AFVO	250

Area #	Contents	Max Capacity (gallons)
426DRA	ENGINE OIL, HYDRAULIC OIL	110 (2x55)
433DRA	ENGINE OIL, LUBRICATING OIL	110 (2x55)
433DRB	LUBRICATING OIL	220 (4X55)
454DRA	USED OIL, ENGINE OIL, LUBRICATING OIL	770 (14x55)
455DRA	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	220 (4X55)
460DRA	ENGINE OIL	880 (16x55)
460DRB	ENGINE OIL	110 (2x55)
460DRC	ENGINE OIL, USED OIL	165 (3x55)
586DRA	AFVO	110 (2x55)
806DRA	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	385 (7x55)
806DRB	ENGINE OIL	55 (1X55)
836DRA	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	2,695 (49x55)
836DRB, DRC, DRD	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL, USED OIL	385 (7x55)
836DRE	USED OIL	110 (2x55)
845DRA	ENGINE OIL	550 (10x55)
845DRB	ENGINE OIL, USED OIL	385 (7x55)
845DRC	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	360 (6X60)
886DRA	ENGINE OIL, LUBRICATING OIL	1,485 (27X55)
886DRB	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL, USED OIL	1,815 (33x55)
886DRC	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	880 (16x55)
1209DRA	ENGINE OIL, HYDRAULIC OIL	220 (4X55)
1406DRA	TBD	TBD
1411DRA	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	660 (12x55)
2504DRA	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	165 (3x55)
2505DRA	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	605 (11x55)
2505DRB	ENGINE OIL	275 (5x55)
2505DRC	ENGINE OIL, LUBRICATING OIL	110 (2x55)
2743DRA	DIESEL FUEL	110 (2x55)
2743DRB	LUBRICATING OIL	220 (4X55)
2743DRC	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	360 (6x60)
2750DRA	USED OIL, USED DIESEL	220 (4X55)
2750DRB	ENGINE OIL, LUBRICATING OIL	110 (2x55)
2750DRC	ENGINE OIL, USED OIL	440 (8x55)
2750DRD	LUBRICATING OIL, USED OIL	110 (2x55)
2750DRE	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	360 (6x60)
3528DRA	USED OIL	550 (10x55)
3528DRB	ENGINE OIL, HYDRAULIC OIL, LUBRICATING OIL	605 (11x55)

Tank ID #	Contents	Tank Capacity (Gal)	Quantity
836MFTA	JET A	500	2
836MFTB	JET A	500	8
886MFTA	JET A	500	10
TT-1 (2451)	JET A	5,000	1
TT-2 (2451)	JET A	5,000	1
TT-3 (2451)	JET A	2,000	1
2505MFTA	JET A	2,500	2

(Figure 5)
(Figure 6)
(Figure 7)
(Figure 8)
(Figure 9)
(Figure 10)
(Figure 11)
(Figure 12)
(Figure 13)
(Figure 14)
(Figure 15)
(Figure 16)
(Figure 17)

Bilge Water Transfer Area
Hazardous Waste Storage (Building 1208)
Diesel, Jet A, and Gasoline Transfer Area
CED Emergency Reponse Equipment Storage
FES Emergency Response Equipment Storage and Command Post
Jet A Transfer Area
Jet A Transfer Area

Bailey Creek
Skiffes Creek
James River
Eustis Lake
Milstead Island Creek
Brown's Lake
Blows Creek
Morleys Gut
Fort Creek
Morrisons Creek
Warwick River
TRADOC Pond

Legend:
- Aboveground Storage Tank Location
- Oil-Filled Operational Equipment
- AFVO
- Underground Storage Tank Location
- Drum Storage Area
- Mobile Storage Containers
- Fort Eustis Boundary
- Surface Water
- Surface Water
- 727 Building Number
- Elevation Contour in Feet Above Mean Sea Level (5' Intervals)

Notes:
* - Indicates location is approximate.

Figures 5 - 17 referenced on this map are included in the SPCC Plan (Annex X to the ICP)

This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

Aerial Photography Source: Fort Eustis, April 10, 2016

Coordinate System: WGS_1984_UTM_Zone_18N

0 250 500 1,000 Feet

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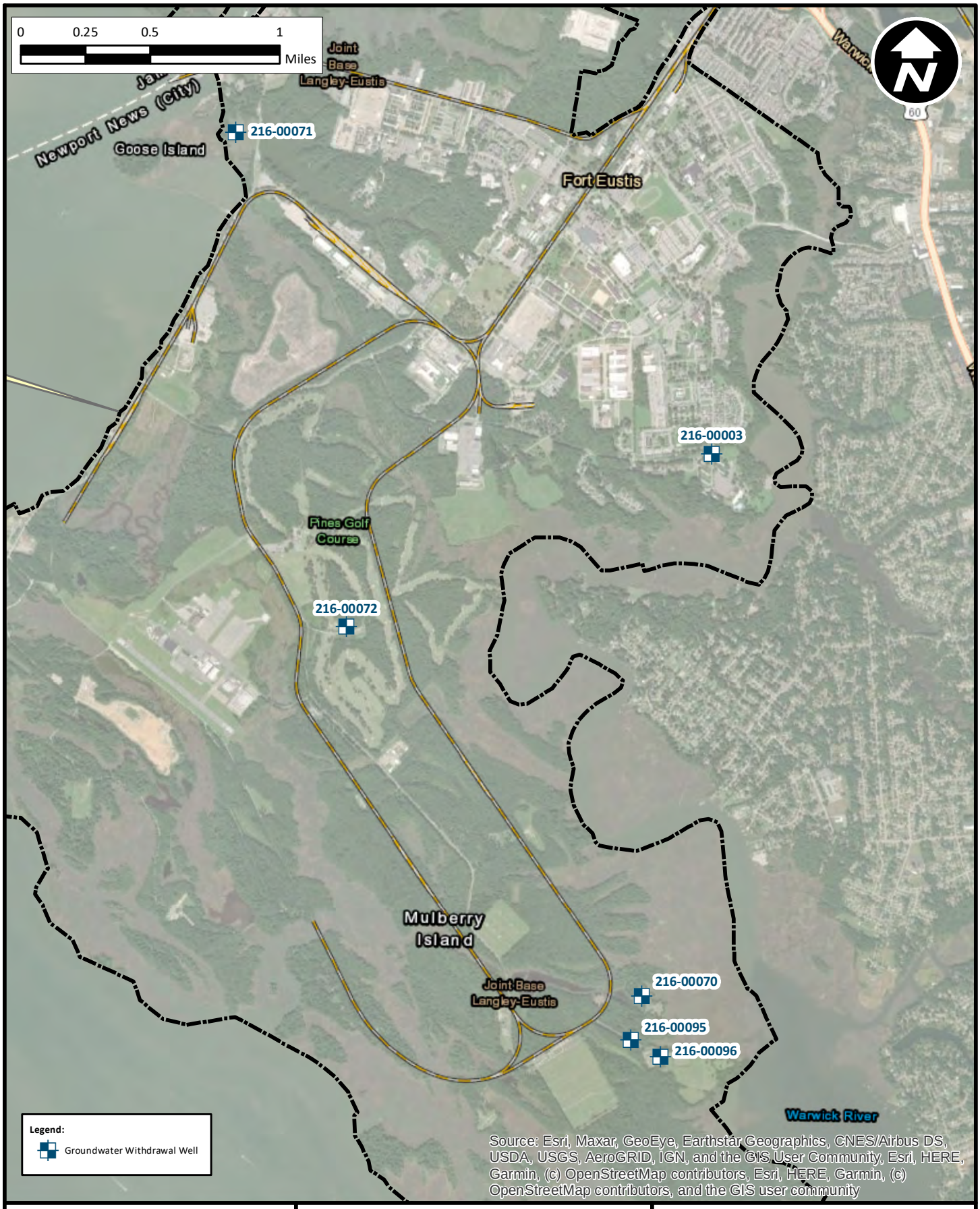
www.bhate.com

Installation Layout

Map 3

Integrated Contingency Plan
JBLE-Eustis

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCBPA2.0002.1002.0201	As Shown	6/11/2021	MRM



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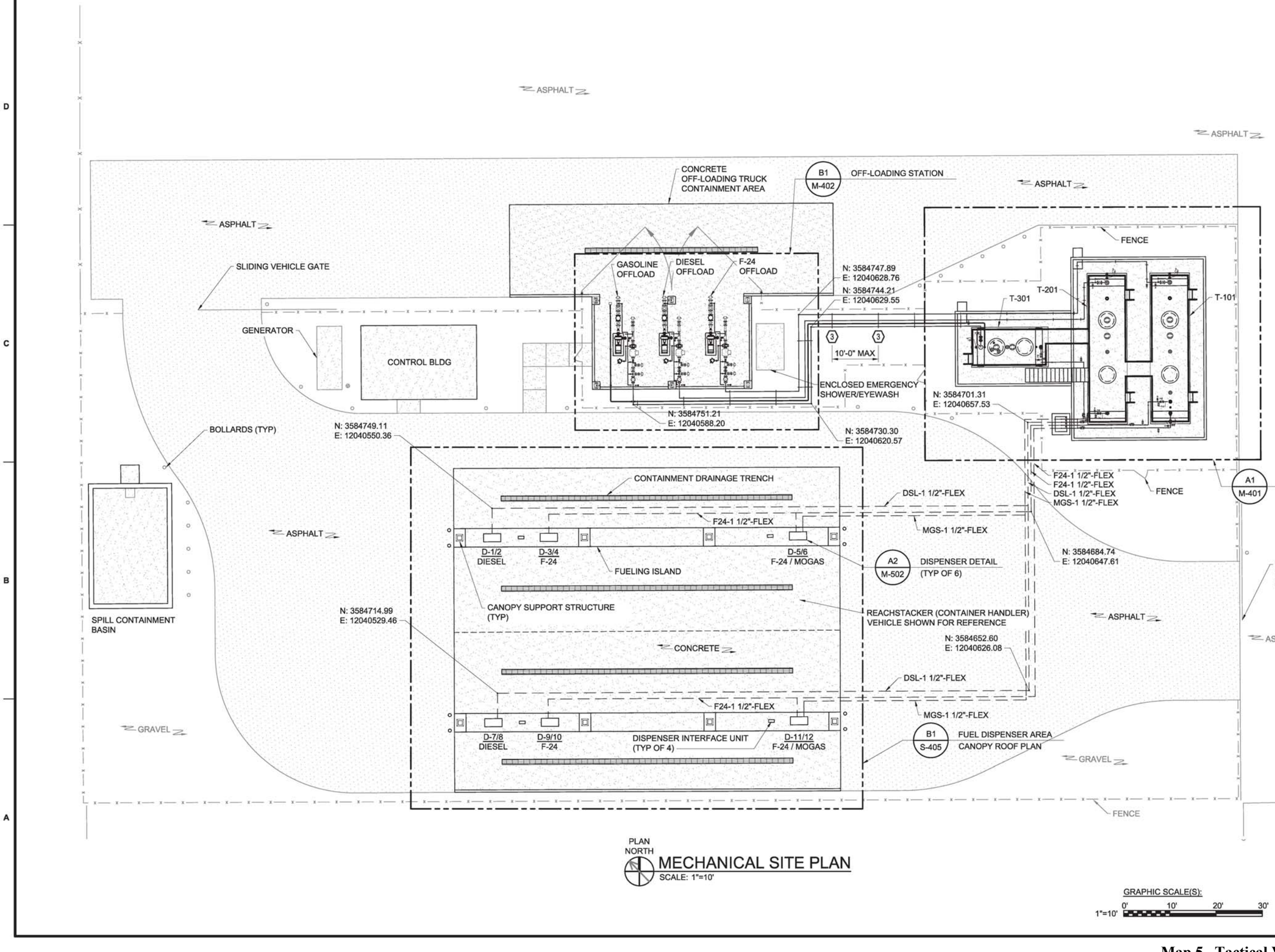
Integrated Contingency Plan
JBLE-Eustis

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCBPA2.0002.1002.0201	As Shown	3/17/2021	MRM

JBLE-Eustis
Groundwater Withdrawal Wells

Map 4



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: CSB
DRAWN BY: RTH
CHECKED BY: BMS
SUBMITTED BY: BROCKENBROUGH
QUALITY CONTROL BY: BROCKENBROUGH
DATE & TIME STAMP: ANSI 'D'

US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
NORFOLK, VA

Brockenbrough

ISSUE DATE: MARCH 2019
PROJECT NO: DESC 1914
CONTRACT NO: W9128F-12-D-0006
FILE NUMBER: DESC1914M-101

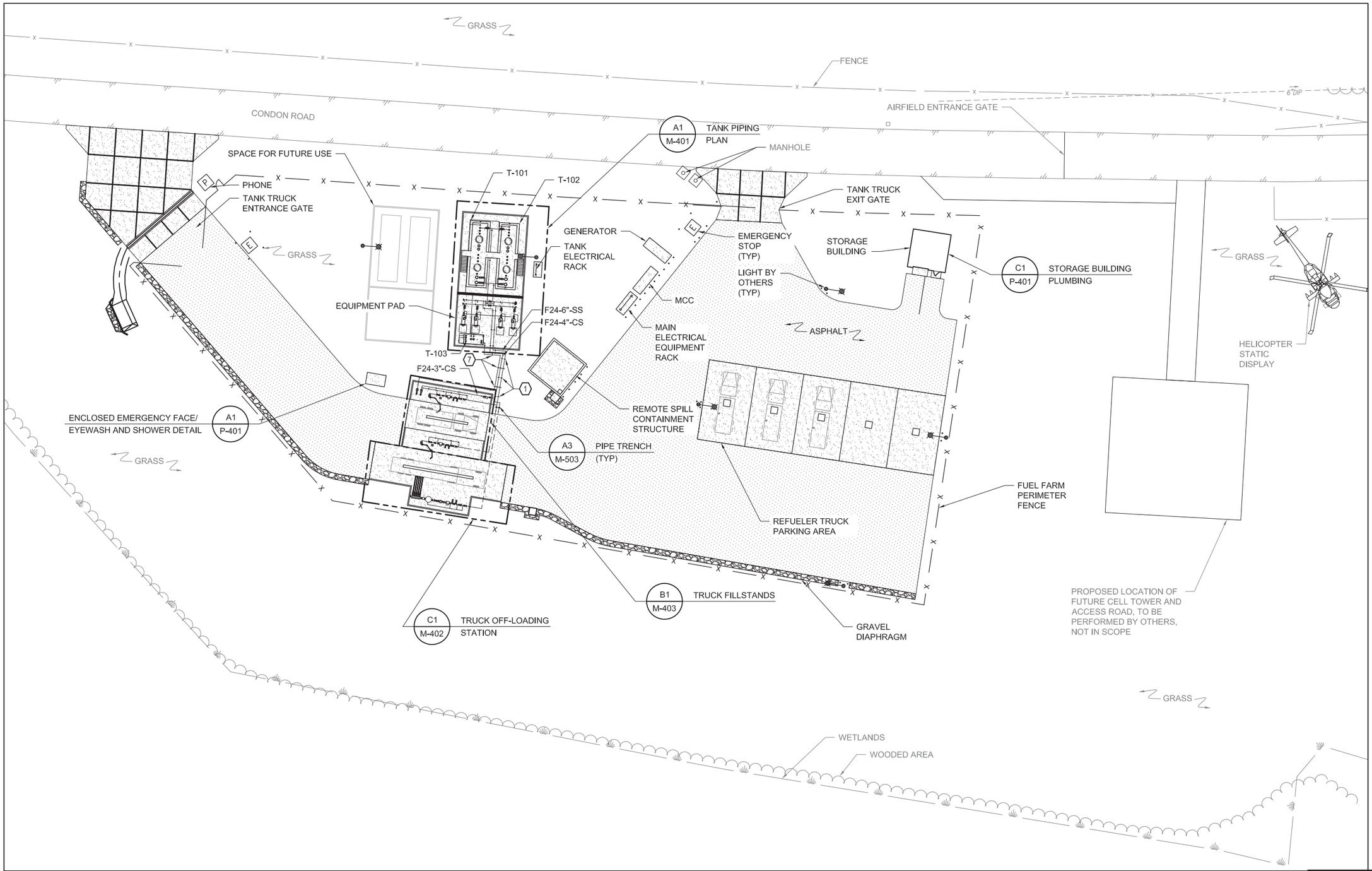
REPLACE GVFF
JOINT BASE LANGLEY EUSTIS
NEWPORT NEWS, VIRGINIA

MECHANICAL SITE PLAN

SHEET ID
M-101

SHEET 000 OF 000

Map 5. Tactical Vehicle Refueling Point Layout



PLAN NORTH

MECHANICAL SITE PLAN

SCALE: 1"=25'

GRAPHIC SCALE(S):

1"=25' 0' 25' 50' 75'

100% Submittal 02-20-19

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: CSB
DRAWN BY: RTH
CHECKED BY: BMS
SUBMITTED BY: BROCKENBROUGH
SIZE: ANSI 'D'
ISSUE DATE: MARCH 2019
PROJECT NO: DESC 1909
CONTRACT NO: W9128F-12-D-0006
FILE NUMBER: DESC1909M-101
DATE & TIME STAMP:

US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
NORFOLK, VA

Brockenbrough
Brockenbrough & Associates, Inc. | 501 E. Main Street, Suite 200 | Richmond, Virginia 23219
804.648.3666 (main) | 804.643.3980 (fax)
1011 Boulder Springs Drive, Suite 250 | Virginia Beach, Virginia 23225
804.648.3666 (main) | 804.643.3980 (fax)
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REPLACE FUEL FACILITIES
JOINT BASE LANGLEY-EUSTIS
NEWPORT NEWS, VIRGINIA

MECHANICAL SITE PLAN

SHEET ID
M-101

Map 6. Felker Army Airfield Jet A Fuel Terminal Layout (new terminal)

ATTACHMENT 1B
AREA MAPS

- National Wetlands Inventory – James River Area
- National Wetlands Inventory – JBLE-Eustis Area
- James River Area Recreational Use Map
- James River Navigational Chart

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U.S. Fish and Wildlife Service

National Wetlands Inventory

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

November 17, 2020

Wetlands

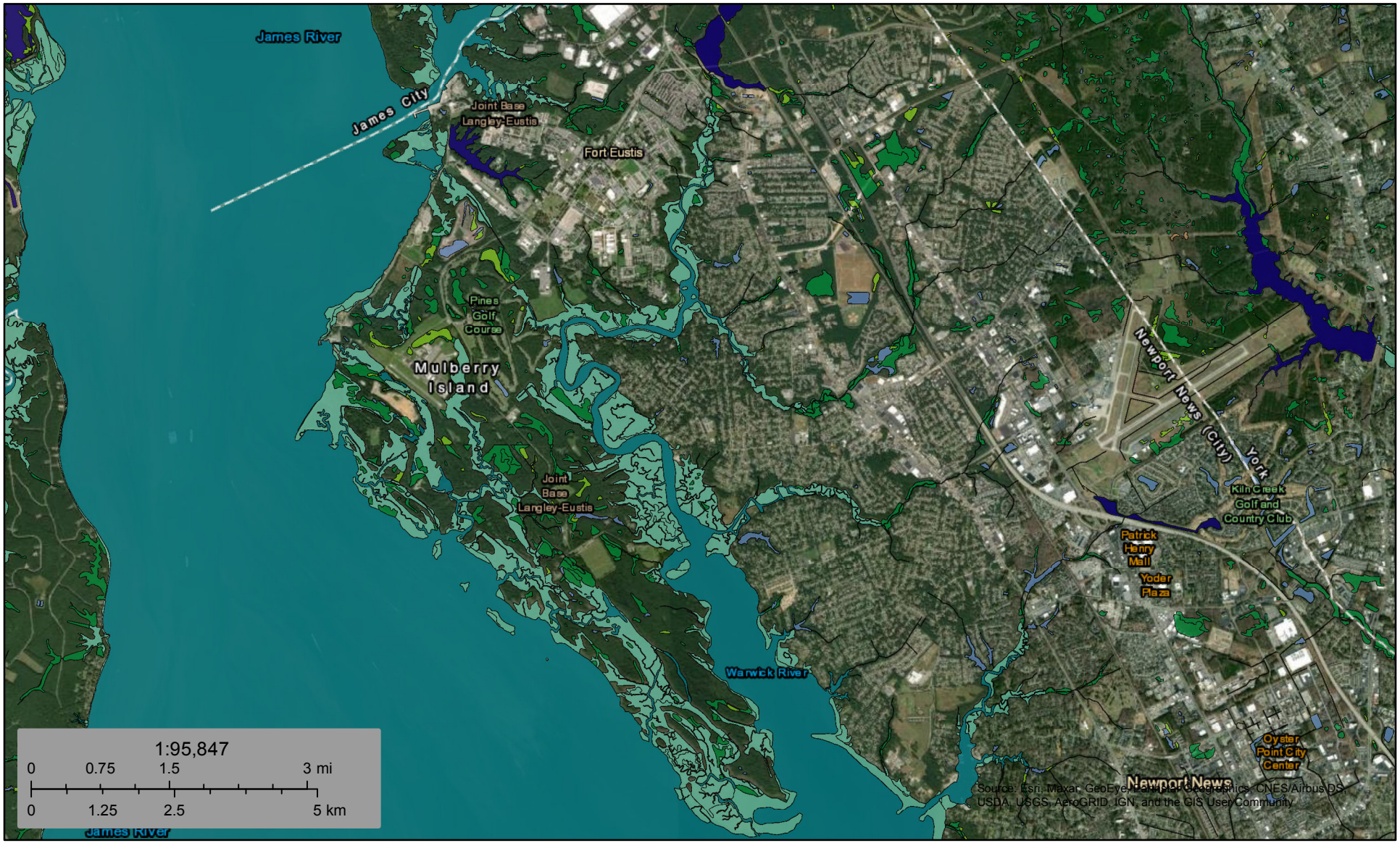
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

National Wetlands Inventory
James River Area

U.S. Fish and Wildlife Service

National Wetlands Inventory

NWI - Environmentally Sensitive Areas

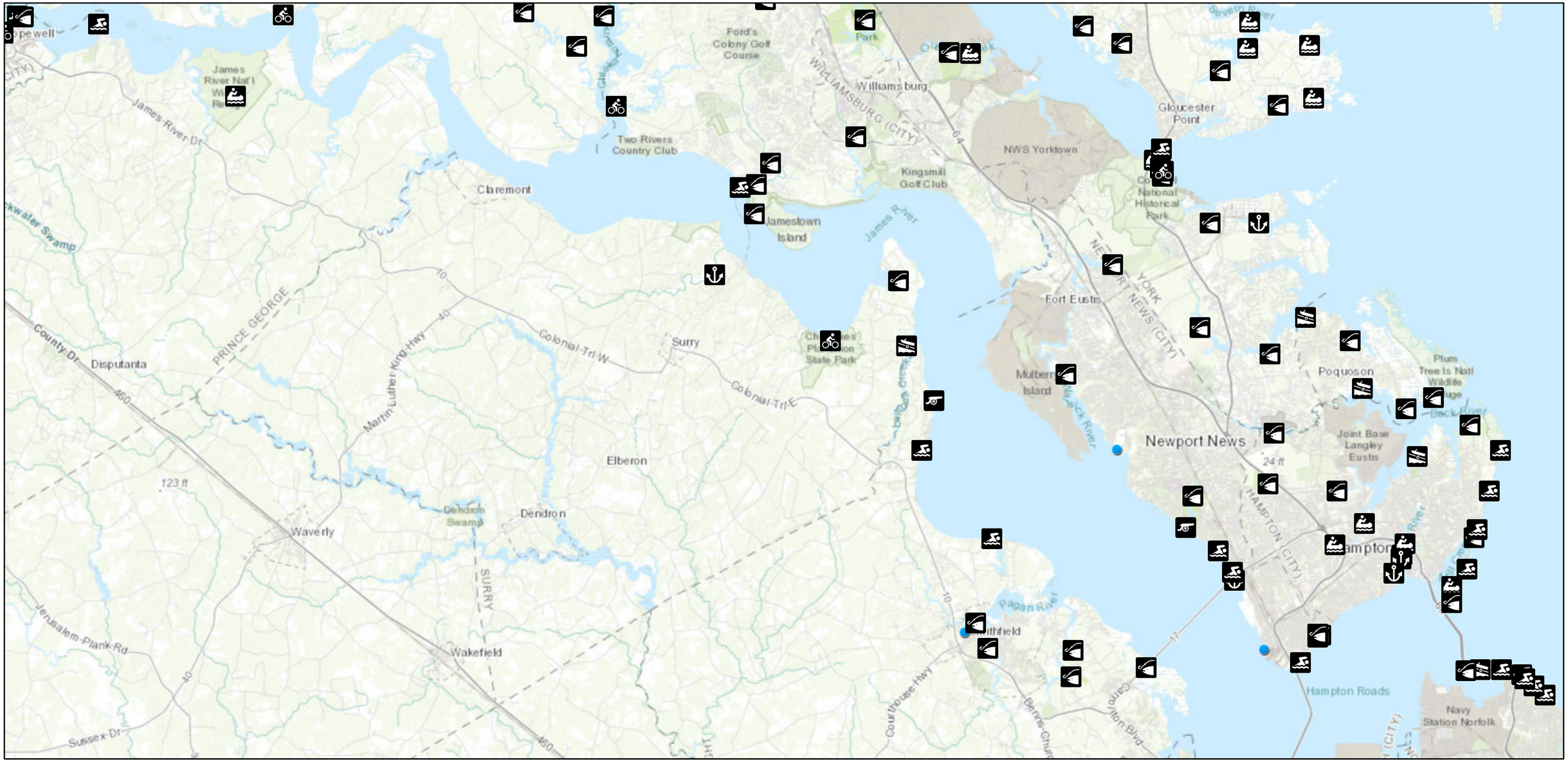


December 11, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ArcGIS Web Map



12/2/2020 10:42:30 PM

- Biking
- Swimming
- Fishing
- Marina
- Boat Ramp
- Canoe Launch
- Climbing
- Wildlife Refuge
- Historic Sites

1:288,895

0 2.75 5.5 11 mi

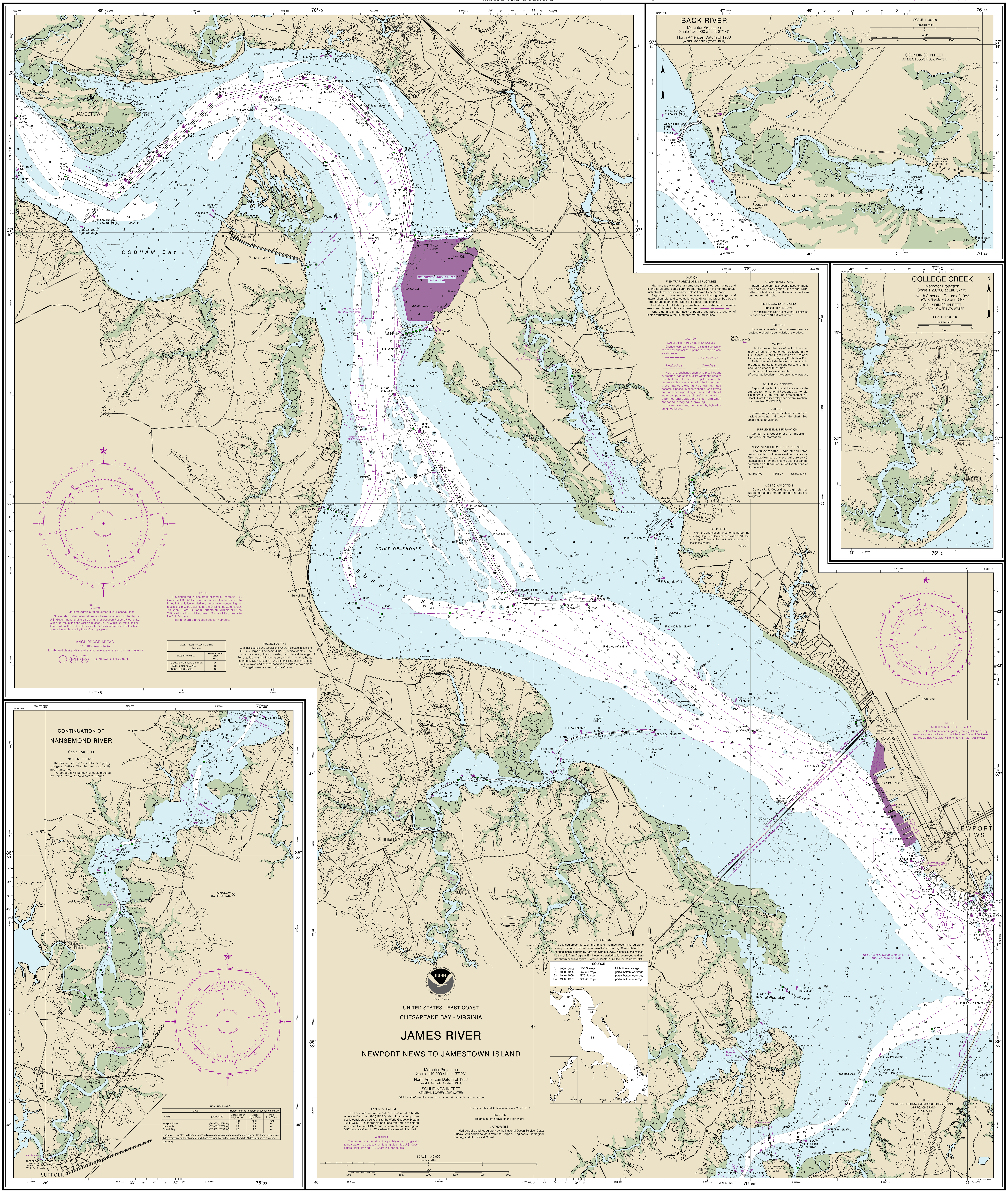
0 4.5 9 18 km

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

Formerly C&GS 529, 1st Ed., Jan. 1912 G-1952-795 KAPP 585

SOUNDINGS IN FEET

12248



TIDAL INFORMATION

PLACE		Mean Higher High Water	Mean High Water	Mean Low Water
NAME	(LAT/LONG)	feet	feet	feet
Newport News	(36°58'N/76°26'W)	2.9	2.7	0.1
Menchville	(37°05'N/76°32'W)	2.9	2.7	0.1
Burwell Bay	(37°03'N/76°40'W)	2.8	2.6	0.1

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.
(Dec 2013)

12248

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

James River, Newport News to Jamestown Island
SOUNDINGS IN FEET - SCALE 1:40,000

12248

Use NOAA electronic navigational charts for the most up-to-date information.

45th Ed., Jan. 2018. Last Correction: 9/4/2020. Cleared through:
LNM: 4620 (11/17/2020), NM: 4820 (11/28/2020)

To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

(POD) providers fulfill a vessel's requirement to carry a navigational chart "published by the National Ocean Service" in accordance with federal regulations, including but not limited to 33 C.F.R. 164.33(a), 33 C.F.R. 164.72(b), and 46 C.F.R. 28.225(a). POD charts meet stringent print standards and can be recognized by an official certification of authenticity printed on the chart. A list of POD providers can be found at: nauticalcharts.noaa.gov/pod

ATTACHMENT 1C
INVENTORY OF ASTS LOCATED AT JBLE-EUSTIS

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ABOVEGROUND STORAGE TANK INVENTORY[10]

Used Oil						
Bldg. No.	**Tank No.**	**Tank Capacity (Gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
438	438-2	500	Concrete/steel	Double-Walled (890 gallons)	~ 400 feet north across asphalt to a storm drain	Convault (1996) Third Port
460	460-4	1,000	Concrete/steel	Double-Walled (1,734 gallons)	~ 40 feet southeast across grass to fence line and low-lying area	Convault (1997) Third Port
660	660-1	500	Concrete/steel	Double-Walled (890 gallons)	No floor drains, flows outside ~ 30 feet south to storm drain	Convault (1995) Autocraft shop
668	668-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 20 feet northwest across grass to low-lying area	Convault (1997) Autocraft Inspection Station
806	806-1	264	Steel/steel	Double-Walled (1,000 gallons)	~ 350 feet northwest across concrete to drainage ditch	Myers Used Oil Pod (2005) Motor Pool
836	836-4	500	Concrete/steel	Double-Walled (890 gallons)	~ 250 feet northeast to stormwater ditch	Convault (1996) Battalion Motor Pool
886	886-1	500	Steel/steel	Double-Walled (515 gallons)	~ 100 feet northwest across concrete to storm drain and then to retention pond	Highland Tank 7th Brigade Motor Pool
886	886-2	500	Steel/steel	Double-Walled (515 gallons)	~ 100 feet northwest across concrete to storm drain and then to retention pond	Highland Tank 7th Brigade Motor Pool (not used)
1208	1208-1	300	Steel/steel	Double-Walled (700 gallons) inside Building	Building is a self-contained secondary containment. Both sides of building slope to a sump in the center of the building.	Dunn Industries Temporary Hazardous Waste Storage

[10] 40 CFR Part 112 Appendix F 1.3.5, 1.4.1, 1.5.1.2; 33 CFR §154.1035(e)(1)(i)

Used Oil						
Bldg. No.	**Tank No.**	**Tank Capacity (Gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
1209	1209-4	240	Steel/steel	Double-Walled (385 gallons)	~ 150 feet north out of building across gravel to Eustis Lake	Recycling Center
1383	1383-1	300	Steel/steel	Double-Walled (350 gallons)	Contained in building	Southern Tank & Manufacturing (2013) Firestone
1411	1411-3	500	Concrete/steel	Double-Walled (890 gallons)	5 feet southwest to low-lying drainage ditch	Convault (1996) LRD
1415	1415-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 155 feet across gravel and grass to storm drain	Convault (1995) HVAC Air Filter Storage
2414	2414-1	528	Steel/steel	Double-Walled (2,000 gallons)	~ 15 feet southwest on concrete to storm drain	Myers Used Oil Pod (2005) Grumman
2448	2448-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 15 feet northeast across grass to storm drain	Convault (1997) Army Reserve
2505	2505-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 50 feet southwest on concrete to storm drain	Convault (1997) ESC 93
2505	2505-2	300	Steel/steel	Double-Walled (330 gallons)	~ 15 feet south to exterior storm drain (no drains inside)	Highland Tanks ESC 93 (inside)
2606	2606-3	275	Plastic/plastic	Double-Walled and Concrete Dike with Drain (330 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River.	Snyder Industries (2006) James River Reserve Fleet
2606	2606-4	275	Plastic/plastic	Double-Walled and Concrete Dike with Drain (330 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Snyder Industries (2006) James River Reserve Fleet
2606	2606-5	275	Plastic/plastic	Double-Walled and Concrete Dike with Drain (330 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Snyder Industries (2006) James River Reserve Fleet

Used Oil						
Bldg. No.	**Tank No.**	**Tank Capacity (Gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
2606	2606-6	275	Plastic/plastic	Double-Walled and Concrete Dike with Drain (330 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Snyder Industries (2006) James River Reserve Fleet
2606	2606-7	500	Concrete/steel	Double-Walled and Concrete Dike with Drain (890 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Convault (1996) James River Reserve Fleet
2606	2606-8	500	Concrete/steel	Double-Walled and Concrete Dike with Drain (890 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Convault (1996) James River Reserve Fleet
2702	2702-3	500	Concrete/steel	Double-Walled (890 gallons)	~ 20 feet northeast under fence to drainage ditch	Convault (1997)
2743	2743-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 75 feet west across asphalt to storm drain	Convault (1995) 508th Motor Pool
2750	2750-4	500	Concrete/steel	Double-Walled (890 gallons)	Flows outside ~150 feet east across gravel to drainage ditch (no floor drains)	Convault (1996) Train Maintenance Shop
2750	2750-5	500	Concrete/steel	Double-Walled (890 gallons)	~ 100 feet east across gravel to drainage ditch	Convault (1996) LRC Heavy Equipment Maintenance
Total No. Tanks = 27		**Total Capacity = 12,132 gallons**				

Heating Oil ASTs*						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
843	843-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 15 feet west across grass to low-lying area	Convault (1996) Equipment Rental
1405	1405-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 200 feet southwest across asphalt to storm drain	Convault (1996) Flight Engineer Facility
1423	1423-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 50 feet southwest across asphalt to storm drain	Convault (1996) Engineering/ Maintenance
3507	3507-2	500	Concrete/steel	Double-Walled (890 gallons)	~ 20 feet southwest across grass to culvert into drainage ditch	Convault (1996) AATD
3509	3509-2	500	Concrete/steel	Double-Walled (890 gallons)	~ 50 feet north across grass to storm drain	Convault (1996) AATD
3523	3523-1	500	Concrete/steel	Double-Walled (890 gallons)	1 foot east to trench drain to the storm sewer system	Convault (1996) AATD
3905	3905-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 40 feet north down grass hill to drainage ditch	Convault (1996) Nuclear, Biological, and Chemical (NBC) School
3910	3910-1	500	Concrete/steel	Double-Walled (975 gallons)	~ 20 feet southwest on asphalt and then ~ 60 feet northwest downhill to culvert in drainage ditch	Central Industries The Range
3911	3911-1	500	Concrete/steel	Double-Walled (975 gallons)	~ 40 feet northeast and then ~ 60 feet northwest downhill to culvert in drainage ditch	Central Industries The Range
Total No. Tanks = 9 **Total Capacity = 4,500 gallons** *Heating Oil ASTs are regulated under 40 CFR Part 112. They are not regulated by VDEQ under 9VAC25-91.						

Gasoline ASTs						
Bldg #	**Tank #**	**Tank Capacity (gallons)**	**Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
843	843-2	500	Concrete/steel	Double-Walled (890 gallons)	~ 10 feet north across grass to low-lying area	Convault (1996), OOS Equipment Rental
866	866-2	500	Concrete/steel	Double-Walled (890 gallons)	~ 10 east feet on grass and then north in drainage ditch	Convault (1996), OOS Morale, Welfare, and Recreation (MWR) Go-Cart
1428	1428-1B	250	Concrete/steel	Double-Walled (890 gallons)	~ 15 feet north across gravel	Dual-chambered Convault (2003) Sports Field Maintenance
2606	2606-2	250	Steel/steel	Double-Walled and Concrete Dike with Drain (456 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Containment Solutions (2010) James River Reserve Fleet
3302	3302-2	500	Steel/steel	Double-Walled (620 gallons)	~ 30 feet northwest to storm drain	Highland Tanks Lawncare Storage
3506	3506-1B	500	Concrete/steel	Double-Walled (3,360 gallons)	~ 20 feet northwest on grass and gravel to wetland	Dual-Chambered Convault (1995) GC Maintenance
3520	3520-1	500	Concrete/steel	Double-Walled (550 gallons)	5 feet west to drainage ditch and then north in the ditch	Econovault Golf Course Maintenance
3941	3941-3	112	Concrete/steel	Double-Walled (120 gallons)	~ 30 feet east across roadway to ditch	Turner Tanks Range Operations
2734	2734-9	6,000	Steel/steel	Double-Walled (TBD gallons)	South and southeast toward tributaries to James River	Installed at new TVRP in 2020, expected to be turned over to Government in 2021

Total No. Tanks = 8 (9) **Total Capacity = 3,112 gallons (9,112)**

( ) Totals after TVRP system is turned over to Government (not turned over to Government as of 1 June 2021).

OOS = Out of service

Diesel/Jet-A/Motor Oil ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
460	460-5	2,000	Concrete/steel	Double-Walled (3,015 gallons)	~ 50 feet southeast across grass to fence line and low-lying area	Convault (1998) (Diesel) Third Port Training Support
460	460-6	300	Steel/steel	Building Containment (capacity not determined)	No floor drains, contained within building	Day Tank (1998) (Diesel) Third Port Training Support
587	587-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 40 feet south across grass to drainage ditch	Convault (1997) (Diesel) Fuels Boiler Medical and Dental Administration (MEDDAC)
589	589-1	300	Steel/steel	Building Containment (capacity not determined)	Out of building and then northwest ~ 20 feet across grass to low-lying area	Day Tank (1996) (Diesel) Fire Pump Room, MEDDAC
703	703-1	70	Steel/steel	Dike (180 gallons)	Drain inside building likely flows to drainage ditch to retention pond	Day Tank at Fire Pump House at Army and Air Force Exchange System (AAFES) Car Wash (Diesel)
1209	1209-1	500	Steel/steel	Double-Walled (530 gallons)	~ 200 feet north across gravel to Eustis Lake	Day Tank with Fuel Pump, Recycling Center (Diesel)
1209	1209-2	500	Steel/steel	Dike (capacity not determined)	~ 300 feet north across gravel to Eustis Lake	Off-spec fuel (2003)
1209	1209-3	500	Steel/steel	Dike (capacity not determined)	~ 300 feet north across gravel to Eustis Lake	Off-spec fuel (2003)
1383	1383-2	275	Steel/steel	Double-Walled (310 gallons)	Out of building and then south ~ 50 feet to storm drain	Firestone (Motor Oil)
1383	1383-3	275	Steel/steel	Double-Walled (310 gallons)	Out of building and then south ~ 50 feet to storm drain	Firestone (Motor Oil)
1416	1416-1	180	Steel/steel	Double-Walled (198 gallons)	~ 15 feet southeast to gravel area	Day Tank in Fire Pump Room at LRS Paint Shop (Diesel)

Diesel/Jet-A/Motor Oil ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
1423	1423-2	500	Steel/steel	Double-Walled (capacity not determined)	~ 30 feet southwest across asphalt to storm drain	Fuels vehicles (Diesel) Engineering/ Maintenance
1428	1428-1A	500	Concrete/steel	Double-Walled (890 gallons)	~ 15 feet north across gravel	Dual-Chambered Convault (2003) (250 gallons diesel, 250 gallons gasoline) Sports Field Maintenance
2015	2015-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 50 feet east to drainage ditch	Fuels equipment (Diesel) CES Storage Shed
2404	2404-1	500	Steel/steel	Double-Walled (516 gallons)	~ 100 feet west across grass to culvert	Fire Pump at Water Tower (Diesel)
2404	2404-2	500	Steel/steel	Double-Walled (516 gallons)	~ 100 feet west across grass to culvert	Fire Pump at Water Tower (Diesel)
2451	2451-1	30,000	Steel/steel	Concrete Containment with Drain (65,454 gallons)	Out of diked area ~ 40 feet southwest into drainage ditch to wetlands.	Fuel Terminal (1999) (Jet A)
2451	2451-2	30,000	Steel/steel	Concrete Containment with Drain (65,454 gallons)	Out of diked area ~ 40 feet southwest into drainage ditch to wetlands	Fuel Terminal (1999) (Jet A)
2451	2451-3	250	Concrete/steel	Double-Walled (890 gallons)	~ 90 feet southwest into drainage ditch to wetlands	Fuel Terminal (1995) (Jet A) Product Recovery Tank
2606	2606-1	500	Concrete/steel	Double-Walled and Concrete Dike with Drain (890 gallons)	Out of diked area ~ 50 feet southwest to a retention area and then to James River	Fuels Vehicles/ Equipment (1996) (Diesel) James River Reserve Fleet
3302	3302-1	500	Steel/steel	Double-Walled (620 gallons)	~ 30 feet northwest to storm drain	Fuels equipment (Diesel) Lawn Equipment Storage

Diesel/Jet-A/Motor Oil ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/ interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
3506	3506-1A	1,000	Concrete/steel	Double-Walled (3,360 gallons)	~ 20 feet northwest on grass and gravel to wetland	Convault Split Tank (1995) (500 gallons gasoline and 500 gallons diesel) GC Maintenance
3517	3517-1	750	Steel/steel	Double-Walled (1,100 gallons)	~ 15 feet southwest across grass to storm drain	Jet A Fuel Tank AATD
3941	3941-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 30 feet across roadway to wet ditch	Fuels vehicles and equipment (1996) (Diesel) Range Operations
3941	3941-2	112	Steel/steel	Spill Pallet (120 gallons)	~ 30 feet across roadway to ditch	Fuels Equipment (Diesel) Range Operations
2451	2451-6	20,000	Steel/steel	Double-Walled (capacity TBD)	Southwest and southeast to low wet areas and ultimately to James River.	To be installed at new Felker Airfield Fuel Terminal
2451	2451-7	20,000	Steel/steel	Double-Walled (capacity TBD)	Southwest and southeast to low wet areas and ultimately to James River.	To be installed at new Felker Airfield Fuel Terminal
2451	2451-8	1,000	Steel/steel	Double-Walled (capacity TBD)	Southwest and southeast to low wet areas and ultimately to James River.	To be installed at new Felker Airfield Fuel Terminal
2734	2734-7	12,000	Steel/steel	Double-Walled (capacity TBD)	South and southeast toward tributaries to James River	Installed at new TVRP in 2020, expected to be turned over to Government in 2021
2734	2734-8	12,000	Steel/steel	Double-Walled (capacity TBD)	South and southeast toward tributaries to James River	Installed at new TVRP in 2020, expected to be turned over to Government in 2021
Total No. Tanks = 25 (30) **Total Capacity = 71,870 gallons (136,870)** ( ) Totals after TVRP and Felker Army Airfield Fuel Terminal systems are turned over to Government (not turned over to Government as of 1 June 2021).						

Diesel Fuel Generator ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
2	002-1	190	Steel/steel	Double-Walled (209 gallons)	~ 50 feet northwest to wetland area	Generator Subbase Tank Visitors Center
6	006-1	383	Steel/steel	Double-Walled (421 gallons)	~ 15 feet north to wooded area	Generator Subbase Tank (2004) Water Distribution Center Generator
9	009-1	335	Steel/steel	Double-Walled (368 gallons)	~ 40 feet northeast through gravel to low-lying area	Generator Subbase Tank (2012) Guard Shack
210	210-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 20 feet west across pine straw to low-lying area	Convault Day Tank for Generator (1995) TRADOC
401	401-1	132	Steel/steel	Double-Walled (251 gallons)	~ 300 feet northeast across grass to low-lying area	Generator Subbase Tank (2015) AATD
451	451-4	200	Steel/steel	Double-Walled (206 gallons)	~ 50 feet west downhill to a drainage ditch and then northwest to a storm drain	Generator Subbase Tank Harbor Master
515	515-2	700	Steel/steel	Double-Walled (770 gallons)	~ 20 feet northwest to storm drain in parking lot	Day Tank for Generator MEDDAC Clinic
601	601-1	500	Steel/steel	Double-Walled (610 gallons)	~70 feet west across grass to storm drain	Generator Subbase Tank on Trailer (2008) (portable generator) 733d MSG Command HQ
601	601-2	500	Steel/steel	Double-Walled (1,021 gallons)	~ 50 feet west across grass to storm drain	Generator Subbase Tank (2003) 733d MSG Command HQ
648	648-2	600	Steel/steel	Double-Walled (797 gallons)	~ 30 feet northeast across asphalt to storm drain	Generator Subbase Tank (2012) Emergency Services Center
661	661-1	400	Steel/steel	Double-Walled (480 gallons)	~ 100 feet west across asphalt to storm drain	Generator Subbase Tank (1999) TRADOC

Diesel Fuel Generator ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
661	661-2	3,000	Steel/steel	Double-Walled (4,180 gallons)	~ 30 feet southwest across asphalt to storm drain	Generator Subbase Tank (2005) TRADOC
662	662-1	366	Steel/steel	Double-Walled (403 gallons)	~ 75 feet east across grass and asphalt to storm drain	Generator Subbase Tank (2012) 93d Signal
667	667-1	2,700	Steel/steel	Double-Walled (6,860 gallons)	~ 60 feet northeast across grass to storm drain on Monroe Avenue	Generator Subbase Tank Directorate of Information Management (DOIM)
691	691-1	1,800	Steel/steel	Double-Walled (2,600 gallons)	~ 15 feet southwest to asphalt parking lot and then either south of west to storm drain	Generator Subbase Tank Barracks (Peak Shave)
692	692-1	1,800	Steel/steel	Double-Walled (2,600 gallons)	~ 20 feet southwest to low-lying area in grass	Generator Subbase Tank Barracks (Peak Shave)
705	705-1	773	Steel/steel	Double-Walled (997 gallons)	~ 150 feet north across concrete to storm drain	Generator Subbase Tank (2011) IMCOM/TRADOC/MEDDAC Admin
705	705-2	200	Steel/steel	Double-Walled (246 gallons)	~ 150 feet north down Reed Street to storm drain	Generator Subbase Tank (2011) IMCOM/TRADOC/MEDDAC Admin
825	825-1	300	Steel/steel	Double-Walled (330 gallons)	~ 100 feet south and then east to storm drain	Generator Subbase Tank (2006) 7th Transportation Group HQ
839	839-1	331	Steel/steel	Double-Walled (400 gallons)	~ 30 feet south across grass to stormwater drain	Generator Subbase Tank (2010) Air Education and Training Command Simulation Training Center
900	900-1	129	Steel/steel	Double-Walled (142 gallons)	~ 30 feet south downhill on grass and then west on asphalt to storm drain	Generator Subbase Tank (2011) 2nd Access Gate
950	950-1	12,000	Steel/steel	Double-Walled (12,025 gallons)	Southwest under enclosure and then ~ 40 feet across asphalt to storm drain	Generator Tank (2011) TRADOC Offices

Diesel Fuel Generator ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
950	950-2	12,000	Steel/steel	Double-Walled (12,025 gallons)	Southwest under enclosure and then ~ 40 feet across asphalt to storm drain	Generator Tank (2011) TRADOC Offices
1013	1013-1	269	Steel/steel	Double-Walled (296 gallons)	~ 50 feet southwest downhill through grass to a stormwater ditch/creek	Generator Subbase Tank (1998) 93d Signal
1013	1013-2	500	Concrete/steel	Double-Walled (890 gallons)	~ 50 feet southwest downhill through grass to a stormwater ditch/creek	Convault Day Tank (1997) 93d Signal
1028	1028-1	300	Steel/steel	Double-Walled (330 gallons)	~ 10 feet northeast to stormwater ditch in woods	Generator Subbase Tank (2011) Emergency Operations Center (EOC)
1034	1034-1	675	Steel/steel	Double-Walled (890 gallons)	~ 150 feet northwest across grass to a wetland area	Generator Subbase Tank Army Reserve
1382	1382-1	449	Steel/steel	Double-Walled (561 gallons)	~ 40 feet southeast to storm drain	Generator Subbase Tank Commissary
1387	1387-1	1,400	Steel/steel	Double-Walled (2,090 gallons)	~ 150 feet north across grass and gravel to a loading dock trench drain	Generator Subbase Tank (2011) Telephone Exchange Building
1406	1406-1	330	Steel/steel	Double-Walled (363 gallons)	~ 40 feet north across gravel to low-lying area	Generator Subbase Tank Directorate of Public Works (DPW) Maintenance Shops
1406	1406-2	480	Steel/steel	Double-Walled (528 gallons)	~ 40 feet north across gravel/asphalt to storm drain	Mobile Generator Subbase Tank (2006) DPW Maintenance Shops
1406	1406-3	160	Steel/steel	Double-Walled (267 gallons)	~ 40 feet north across gravel/asphalt to storm drain	Mobile Generator Subbase Tank (2009) DPW Maintenance Shops
1406	1406-4	160	Steel/steel	Double-Walled (267 gallons)	~ 40 feet north across gravel/asphalt to storm drain	Mobile Generator Subbase Tank (2009) DPW Maintenance Shops

Diesel Fuel Generator ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
1406	1406-5	270	Steel/steel	Double-Walled (335 gallons)	~ 40 feet north across gravel/asphalt to storm drain	Mobile Generator Subbase Tank (2018) DPW Maintenance Shops
1407	1407-1	706	Steel/steel	Double-Walled (1,000 gallons)	Northwest across grass and then north 100 feet on asphalt to storm drain	Generator Subbase Tank (2004) 733d CES
1408	1408-1	600	Steel/steel	Double-Walled (710 gallons)	~ 50 feet southeast across gravel and then south across asphalt to storm drain	Generator Subbase Tank (2010) Communications Shed
1410	1410-2	305	Steel/steel	Double-Walled (430 gallons)	~ 40 feet east across grass to storm drain in grass	Generator Subbase Tank (2004) Base Support Administration
1413	1413-1	396	Steel/steel	Double-Walled (490 gallons)	~ 15 feet southwest across grass to storm drain	Generator Subbase Tank Base Support Administration
1503	1503-1	600	Steel/steel	Double-Walled (900 gallons)	~ 80 feet southwest across parking lot to drainage ditch and then northwest to culvert	Generator Subbase Tank (2010) TADLP Contractor Building
1504	1504-1	2,600	Steel/steel	Double-Walled (3,411gallons)	~ 20 feet west to drainage ditch	Generator Subbase Tank (2011) Civil Support
1605	1605-1	80	Steel/steel	Double-Walled (88 gallons)	~ 40 west across loading dock and then 100 feet south across concrete to storm drain	Generator Subbase Tank Logistics Support Storage
1700	1700-1	230	Steel/steel	Double-Walled (420 gallons)	~ 50 feet northeast across pea gravel to grassy low-lying area	Generator Subbase Tank (2004) General Small Inn
1754	1754-1	500	Concrete/steel	Double-Walled (890 gallons)	~ 30 feet west across grass to low-lying area	Day Tank for Generator (1996) Radio Building
2023	2023-1	150	Steel/steel	Double-Walled (187 gallons)	~ 35 feet south on concrete and gravel to storm drain	Generator Subbase Tank ASUS Office Building
2300	2300-1	3,979	Steel/steel	Double-Walled (4,377 gallons)	~ 60 feet northeast across grass to storm drains	Generator Subbase Tank (2016) 128th DFAC

Diesel Fuel Generator ASTs						
Bldg. No.	**Tank No.**	**Tank Capacity (gallons)**	**Tank Material (exterior/interior)**	**Secondary Containment (type and capacity)**	**Potential Spill Pathway**	**Additional Information**
2401	2401-1	200	Steel/steel	Double-Walled (220 gallons)	~ 40 feet south across grass to low-lying area	Generator Subbase Tank (2009) Fire Station
2417	2417-1	600	Steel/steel	Double-Walled (750 gallons)	~ 5 feet southwest across grass to low-lying swale	Generator Subbase Tank (2016) Vault Light
2517	2517-1	600	Steel/steel	Double-Walled (710 gallons)	~ 20 feet south under gate to storm drain in grass	Generator Subbase Tank (2010) DOIM/ Communications
2612	2612-1	612	Steel/steel	Double-Walled (740 gallons)	~ 40 feet east to low-lying wetland area	Generator Subbase Tank James River Reserve Fleet
2717	2717-1	600	Steel/steel	Double-Walled (790 gallons)	~ 25 feet southeast under fence to low-lying grass area	Generator Subbase Tank (2012) 128th HQ
2734	2734-1	205	Steel/steel	Double-Walled (225 gallons)	~ 20 feet west across grass under fence to storm drain	Generator Subbase Tank (2014) TVRP Fuel Station
Total No. Tanks = 51 **Total Capacity = 57,795 gallons** IMCOM = United States Army Installation Management Command TADLP = The Army Distributed Learning Program						

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Annex 2. Notification Procedures

All non-routine contacts with government agencies (e.g., those relating to inspections, citations, spills, inquiries, requests for information) or with third parties (e.g., private attorneys, neighbors, citizen groups, news media) MUST be promptly reported to FES and/or CEIE.

Notification requirements

JBLE-Eustis utilizes specific procedures for notifying appropriate personnel in the event of an emergency. These procedures allow for internal, and when applicable, external (i.e., off-site) notifications to occur in a timely and compliant manner. The main objective of these notification procedures is to achieve an expeditious response by personnel and organizations capable of dealing with the identified emergency. These procedures also help maintain regulatory compliance of notification requirements.

If necessary, FES and/or CEIE will establish contact with applicable local, state and/or federal environmental regulatory agencies concerning an incident. This designation and assignment will prevent confusion and assist in proper communications with applicable agencies. The following procedures are to be followed in the event of a spill or discharge of oil at JBLE-Eustis.

2.1 Procedures for Internal Notifications

Upon discovery of an incident, the discoverer evaluates the type of emergency, the immediate impact of the incident, and what initial response actions are necessary. If the incident can be handled with available resources, the initial discoverer will respond to the spill and will immediately notify FES at **911** or 757-878-1008.

Upon the arrival of FES, efforts will be made to confirm the incident (e.g., confirmation of an AST leak/rupture, as opposed to *de minimis* staining from vehicular traffic).

It is important that the person discovering the incident assesses the situation correctly (e.g., *has the spill reached catch basins*), including categorizing the incident, and immediately obtaining the following information:

- Exact location of the spill or emergency,
- Type/nature of material spilled,
- Description of the spill or emergency/incident,
- Personal injury(ies),
- Estimate of amount of material spilled,
- Estimated degree of environmental pollution,
- Property damage, and
- Initial remedial or emergency response steps taken.

A list of internal contacts and phone numbers are listed in the **Table A2-1** below.[11]

[11] 40 CFR Part 112 Appendix F 1.3.1, 1.3.4; 33 CFR §154.1035(e)(2)

Table A2-1. Internal Notification Contacts

Team Member	Directorate	Division/ Branch	Name	Contact Number
Incident Commander	FES		Mr. Dale Hankins	**911** (757) 878-1008
Qualified Individual	CES		Base Civil Engineer	(757) 878-3642 or (757) 342-3576
Third Port Area (Hazardous waste storage area)	7th Transportation Brigade (expeditionary)	Third Port	Mr. Ray Perea	(757) 272-9642 (757) 878-4688
Felker Army Airfield Jet Fuel F-24 Fuel Terminal	Directorate of Plans, Training, Mobilization and Security (DPTMSEC)	Aviation Division, DPTMSEC	Mr. Teddy Harlow	(757) 812-0808
James River Reserve Fleet	Maritime Administration	Maritime Administration	Mr. Martin Walker	(757) 887-3233
TVRP	Directorate of Logistics (DOL)	Northrup-Grumman Technical Services, Inc. (contractor for DOL)	Mark Morris	(757) 878-6096
AAFES	AAFES	N/A	Roy Punzalan	(757)962-3766
ASTs/USTs	CES	CEIE	Mr. Paul A. James	(757) 878-7362
Transformers	Dominion Virginia Power	Dominion Virginia Power	Mr. Steve Buehl	(804) 257-4933

2.2 Community Notifications

All but the most insignificant incidents of fire, explosion, or material release will require the assistance of outside emergency forces, agencies, or contractors. Notification may include any of the following community agencies listed in the Table below.[12]

Table A2-2. Community Notifications

Organization	Telephone Number
Spill Response/Management and Evacuation Assistance	
Hampton Sheriff	757-926-2540
State Fire Marshal	804-371-0220
Hampton Division of Fire & Rescue	757-727-6580
Peninsula Local Emergency Planning Committee (LEPC)	757-565-7617

[12] 40 CFR Part 112 Appendix F 1.3.1

Organization	Telephone Number
Virginia State Police	804-674-2000
Virginia Port Authority	757-683-8000
USCG Captain of the Port (COTP) (Sector Hampton Roads)	757-483-8567 (24-hour) 757-398-6231
Medical Assistance/Treatment	
Poison Control Center	800-222-1222
Ambulance services	911
Hospital (Bon Secours Mary Immaculate Hospital)	757-889-5810
Potential Receptors	
Hampton Roads Planning District Commission (local water supply system)	(757) 420-8300
Hampton Roads Sanitation District (HRSD) Chief of Pretreatment and Pollution Prevention After-Hours HRSD Emergencies	757-460-2491 757-460-7045 Middle Peninsula: 877-261-8411 Peninsula: 757-874-3979 South Hampton Roads: 757-460-3200
Huntington Beach (James River)	757-886-7912
James River Country Club (James River)	757-595-3327
Kingsmill Resort (James River)	800-832-5665
Riverfront Park and Hilton Fishing Pier (James River)	757-727-8311
Riverview Farm (park, pier, and beach) (James River)	757-886-7912
Colonial Parkway (James River)	757-893-3400
College Creek Beach (James River)	804-788-8811
Powhatan Indian Village (James River)	757-253-4838
Chippokes Plantation State Park (James River)	757-294-3728
Denbigh Boat Ramp (Warwick River)	757-886-7912
Huntington Park Municipal Boat Ramp (James River)	757-886-7912
James River Marina (Deep Creek)	757-565-3699
Menchville Marina (Deep Creek)	757-926-1400
Deep Creek Landing Marina (Deep Creek)	757-877-9555
Warwick Yacht and Country Club (Deep Creek)	757-930-0561
Hog Island Wildlife Management Area (James River)	804-367-1000
Ragged Area Wildlife Management Area (James River)	804-829-6580

Notification of and interaction with the media will be the responsibility of the Public Affairs Office. No comments should be given by other JBLE-Eustis personnel or contractors.

2.3 Federal and State Agency Notifications

2.3.1 Notifications for Response Assistance

Local authorities (e.g., police, fire, medical) will provide assistance when contacted by the installation through 911 emergency calls. The 911 dispatcher will establish what initial assistance is required and contact the local authorities, without any additional notifications from JBLE-Eustis. FES will make the proper notifications if additional assistance by local agencies is required at any time during an ongoing response.

Additional assistance (e.g., specialized equipment, personnel) not available from local authorities may be provided by local contractors and vendors, through normal installation procurement procedures, including pre-arranged contracts. The QI has authority to commit any resources necessary to obtain such assistance.

Local emergency management personnel, in coordination with FES and CEIE, will provide notification to impacted off-site area(s) (e.g., evacuation notification) in the event of off-site consequences from any incident on site. A list of external contacts and phone numbers are listed in **Table A2-3**.[13]

Table A2-3. External Notification Contacts

Contact	Phone #
National Response Center	1-800-424-8802 202-267-2675
Virginia Department of Environmental Quality (VDEQ VDEQ (Tidewater Regional Office) VDEQ (Tidewater Regional Office) Preparedness for Response Exercise Program (PREP) Coordinators	1-804-698-4000 1-800-592-5482 (Toll Free in VA) 757-518-2000 757-518-2077
Virginia Emergency Operations Center State Emergency Response Commission (SERC)	800-468-8892 804-674-2400
USEPA Region 3	215-597-9800
USCG Mid-Atlantic Region, Sector Hampton Roads	757-483-8567 (24-hour) 757-398-6231
Hampton Roads Sanitation District (HRSD) Chief of Pretreatment and Pollution Prevention After-Hours HRSD Emergencies	757-460-2491 757-460-7045 Middle Peninsula: 877-261-8411 Peninsula: 757-874-3979 South Hampton Roads: 757-460-3200
Peninsula Local Emergency Planning Commission	757-565-7617
Virginia State Police	804-674-2000

[13] 40 CFR Part 112 Appendix F 1.3.1

Contact	Phone #
Hampton Roads Planning District Commission (local water supply system)	757-420-8300
JBLE-Eustis Weather Station (usaf.jble.1-fw.mbx.ol-a-weather-flight@mail.mil)	757-878-5300
McDonald Army Health Clinic, JBLE-Eustis	757-314-7501 757-314-7500
Bon Secours Mary Immaculate Hospital	757-889-5810
HEPACO - Qualified Cleanup Contractor	1-800-888-7689 (24 hour)
HEPACO - Point of Contact	757-543-5718
Headquarters Training and Doctrine Command (HQ TRADOC)	757-727-2362 (FAX)
United States Army Center for Health Promotion and Preventive Medicine (USACHPPM)	410-436-3816 DSN: 584-3816

Upon contact, state and federal agencies will request detailed information about the incident to assist in evaluating the extent and severity of the spill. If possible, the following information should be collected prior to placing telephone calls to the required agencies:

- Address and telephone number of the installation
- Spill date and time
- Type of product spilled
- Location of spill
- Weather conditions at the spill location
- Estimate of the total quantity spilled
- Estimate of the quantity spilled into navigable water
- Source of the spill
- Description of the affected media (water, air, land)
- Cause of the spill
- Damages or injuries caused by the spill
- Actions used to stop, remove and mitigate the effects of the spill
- Whether an evacuation is needed
- Names of individuals or agencies who have also been contacted

2.3.2 Verbal Notification Requirements

The following outlines the verbal notification requirements related to oil or petroleum spills or discharges. According to 40 CFR Part 112, “oil” means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

NOTE: FES and CEIE, under the direction of the QI or IC, are the only JBLE-Eustis organizations authorized to report spill incidents to external agencies.

Federal Reporting Requirements

Pursuant to 40 CFR §110.6, an immediate telephone call is to be made to the **National Response Center** (**NRC) at (800) 424- 8802** if one of the following occurs:

- The amount of oil violates applicable state water quality standards, or
- The amount of oil causes a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines, or
- The amount of oil causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Virginia Reporting Requirements

The Commonwealth of Virginia requires that all spills of petroleum product in excess of 25 gallons must be reported to the following agencies:

- VDEQ at **1-800-468-8892 or (804) 674-2400**
- VDEQ (Tidewater Region) **(757) 518-2000**

Reporting of Discharges to Water (including from Vessels)

Notification must be made if oil is spilled in sufficient quantity to:

- Exceed the Commonwealth of Virginia's Reportable Quantity,
- Be seen in or on water that has or is in imminent danger of escaping JBLE-Eustis property,
- Cause a sheen,
- Exit the installation property, or
- Pose a threat to human health or the environment

The following agencies should be notified within 24 hours following the spill event:

- NRC **800-424-8802**
- VDEQ Tidewater Regional Office **(757) 518-2000**
- Local Police and Fire Rescue **911**
- Virginia Emergency Operations Center **800-468-8892 or 804-674-2400**

2.4 Procedures for External Written Notifications

After termination of response activities, proper documentation of the incident will be completed for purposes of internal and external (regulatory agency) reporting. FES or CEIE will ensure that all response activities and impacts are properly documented and submitted to applicable agencies. FES or CEIE will be responsible for meeting reporting requirements, either by designating such duties or assuming the responsibility, prior to termination of all emergency response activity. This information will also be used for briefing local authorities, company officials, and news media.

In addition to the required verbal notifications, a written follow-up may be required. In the event of a reportable spill or discharge of oil, JBLE-Eustis will submit written reports as requested by VDEQ, USEPA, or other authority.

If there is a discharge of more than 1,000 gallons of oil in a single discharge, or discharges of more than 42 gallon of oil in each of two discharges occurring within any 12 month period, JBLE-Eustis will submit the following information to the Regional USEPA Administrator and VDEQ within 60 days from the spill or occurrence.

- Name of installation,
- Name of owner or operator of installation,
- Location of the installation,
- Date and year of initial installation operation,
- Maximum storage or handling capacity of the installation and normal daily throughput,
- Description of the installation, including maps, flow diagrams and topographical maps,
- A complete copy of this ICP with any amendments,
- The cause(s) of such spill, including a failure analysis of the system or subsystem in which the failure occurred,
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and replacements,
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence, and
- Such other information as the USEPA Regional Administrator may reasonably require pertinent to the ICP or spill event.

USEPA Region 3 Administrator
1650 Arch Street (3PM52)
Philadelphia, Pennsylvania 19103-2029
800-438-2474 (when calling within the Region)
(215) 814-5000 (Citizen Hotline)

Virginia Emergency Operations Center
9711 Farrar Court, Suite 200
North Chesterfield, Virginia 23236
800-468-8892 or 804-674-2400

VDEQ
Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, Virginia 23462
(757) 518-2000
(757) 518-2009 (fax)

Copies of the required written reports will be distributed to the following:

- FES, JBLE-Eustis
- Environmental Element, JBLE-Eustis
- USEPA Region 3 (when applicable)
- VDEQ

Annex 3. Response Management System

3.1 General

This Annex provides a description of JBLE-Eustis' incident response management system, as well as specific information necessary to guide or support the actions of each response management function. JBLE-Eustis follows the fundamental principles of National Inter-agency Incident Management System (NIIMs) Incident Command System (ICS). The following are attachments to this annex:

- Attachment 3A – Facility Response Organizational Chart and Spill Response Decision Tree
- Attachment 3B – Evacuation Plan
- Attachment 3C – Facility Response Equipment
- Attachment 3D – System Schematics
- Attachment 3E – Certification of the Applicability of the Substantial Harm Criteria
- Attachment 3F – Calculation of Planning Distance and Worst Case Discharge Scenario
- Attachment 3G – Worksheet to Plan Volume of Response
- Attachment 3H – Prediction of Severity of Spill Severity by Tank and Product Type
- Attachment 3I – Spill Response Contract Support
- Attachment 3J – Facility Response for Oil Discharges
- Attachment 3K – List of Threatened and Endangered Species
- Attachment 3L – Cultural and Historic Preservation Sites in the Vicinity of JBLE-Eustis

During an emergency, the installation's response management system organization will establish the following positions to strategically and tactically deal with the incident.

- Command,
- Incident response operations,
- Spill prediction and hazard identification
- Discharge protection/detection
- Logistics, and
- Finance/procurement/administration.

3.2 Command Structure[14]

The functions listed below are designed to cover general emergency situations that may arise during an oil spill release at JBLE-Eustis. Individual function responsibilities may not be necessary or applicable for every spill occurrence at the installation. Specific job duties for the listed positions at JBLE-Eustis are outlined below.

A diagram presenting the JBLE-Eustis ICS is provided in **Attachment 3A**.

[14] 33 CFR §154.1035(e)(4)

3.2.1 Response Management System[15]

3.2.1.1 Incident Commander (IC)

IC	Mr. Dale Hankins. JBLE-Eustis Fire Chief	911
Alternate IC	On Duty Fire Chief	(757) 878-1008 (24 hrs/7 days)
Address	648 Washington Blvd., Fort Eustis, Virginia 23604-5332	

The FES Fire Chief serves as the on-site IC and is available to respond to an emergency by reaching the any location within JBLE-Eustis within a 15 minutes. The Deputy Fire Chief is designated as an Alternate IC. The IC is responsible for the following:

- Managing and coordinating the initial containment and cleanup of the spill.
- Activating additional installation assets deemed necessary for responding to an incident.
- Facilitating/obtaining external assets and meeting reporting requirements.
- Determining when an incident is transitioned to sustained and recovery operations.
- Providing a field assessment of incident-specific circumstances and coordinating appropriate response activities.
- Directing JBLE-Eustis on-site emergency response personnel containment, mitigation, and clean-up activities until the contracted OSRO arrives on scene.
- Coordinating JBLE-Eustis FES and OSRO efforts during containment, mitigation, and clean-up activities in concert with the OSRO principal managers.
- Coordinating activities with the designated State and/or Federal On-Scene Coordinator (OSC).
- Terminating spill response activities when JBLE-Eustis FES, OSRO, and OSC personnel deem it appropriate.

The individual designated as the IC may change at various times throughout the spill response, depending on the severity of the spill. However, the change of command is understood, documented, and clearly communicated among the individuals involved. Notifications of the command change to individuals providing support to the incident are made as it becomes practical or necessary to do so (**Annex 2**).

The IC must remain in charge of the incident until relieved of that duty by another authorized IC.

The IC will provide the internal notifications to activate the FRT and external notifications to applicable federal, state, and local agencies, if necessary.

3.2.1.2 Qualified Individual[16]

QI	Base Civil Engineer	(757) 878-3642 or (757) 342-3576
Alternate QI	Deputy Director CES	(757) 878-4316 or (757) 342-2152
Address	1407 Washington Blvd., Fort Eustis, Virginia 23604-5332	

The QI must be familiar with all aspects of the ICP; installation operations and activities; location and characteristics of oil products and waste handled at the installation; location of records within

[15] 40 CFR Part 112 Appendix F 1.3.4
[16] 33 CFR §154.1026

the installation; and the overall layout of the installation. In addition, this person must have the authority to obligate and commit the resources needed to carry out the ICP.

The individual designated as the QI may change at various times throughout the spill response, depending on the severity of the spill. However, the change of command is understood, documented, and clearly communicated among the individuals involved. Notifications of the command change to individuals providing support to the incident are made as it becomes practical or necessary to do so (**Annex 2**).

External notifications to environmental regulatory reporting agencies will be performed by the QI or delegated by the QI to the CEIE Spill Program Manager. Any further decisions regarding notification of other persons or agencies by the installation should be coordinated with the QI. Persons or agencies reporting to the scene of the incident must report to the Command Post.

In the event of an oil spill/release, the QI has the responsibility and authority to carry out, or delegate, the following actions:[17]

- Contact appropriate individuals on the FRT.
- Identify the character, exact source, amount, and extent of the release
- Notify appropriate federal, state and local agencies.
- Notify the NRC.
- Place the OSRO on alert if there is a threat of a discharge, or if a significant discharge has occurred.
- Secure additional financial and logistical resources as necessary through the CES.
- Assess the effectiveness of containment, mitigation and clean-up activities and initiate alternative activities as necessary.
- Conduct response activity review and initiate change to this response plan as warranted.

The QI has the authority to engage additional contracted help and experts and response equipment.[18]

3.2.1.3 Spill Program Manager, CES, CEIE

The Spill Program Manager serves as the primary environmental advisor during spill emergencies and response for the designated QI and IC. The Spill Program Manager is responsible for:

- Assuming assigned duties as directed by QI and/or IC.
- Maintaining, updating, and demonstrating compliance with regulatory measures outlined in this ICP.
- Assisting and advising the QI and IC regarding specific discharge response strategies and external notifications as required.
- In coordination with the Contracting Officer, provides recommendations to the QI and IC regarding the use of additional contractual support from oil spill/release cleanup firms, initiating emergency purchase order contracts as required, and providing guidance on, and contracts for, disposal of contaminated cleanup materials.
- Coordinating with local civilian communities and installation housing area representatives to ensure that proper warning and protection are provided to avoid effects of the discharge.

[17] 40 CFR Part 112 Appendix F 1.3.6
[18] 40 CFR Part 112 Appendix F 1.7.1

- Serving as primary point of contact to local, state and federal environmental authorities on matters pertaining to the installation's response to spills of oil or hazardous substances.
- Approving all installation report submissions or official contact with outside environmental organizations, local, state or federal agencies.
- Conducting oversight on long term cleanup and recovery operations.
- Coordinating funding for long term cleanup and recovery operations.
- Assessing damage to the environment including effects on ecological systems, wildlife, fisheries, water sources, vegetation, and soils.
- Assist in obtaining containerization for contaminated media, debris, and sorbents.
- Obtaining samples of contaminants and contaminated media as needed for documentation purposes.

3.2.1.4 JBLE-Eustis FES/Senior Fire Official

The Senior Fire Official serves as the initial responder to oil spills/releases on JBLE-Eustis or on neighboring waters of the installation. The Senior Fire Official responding to a spill serves as the IC until such time as the Fire Chief (IC) relieves him/her of their responsibilities. The Senior Fire Official is responsible for:

- Notifying the Fire Chief when spills are reported,
- Taking appropriate action to contain, stop, and limit the effects of the spill,
- Recommending to the Fire Chief when additional or outside resources are required to deal with the spill situation,
- Providing additional assistance to the Fire Chief as needed

3.2.1.5 Civil Engineer Squadron

The CES is responsible for:

- Providing full-time representatives to the IC at the spill site, when requested,
- Coordinating with the QI to initiate work orders as required to support spill response strategy, mitigation, and recovery efforts,
- Providing manpower for operation of spill response equipment and transfer of materials as required by the QI or IC, and
- Coordinating all matters pertaining to deenergizing electrical power.

3.2.1.6 Provost Marshal

The Provost Marshal provides full-time on-site Military Police assistance to the IC in all matters pertaining to security and access to the spill site and areas affected by the spill. The Provost Marshal's responsibilities include:

- Providing Military Police, incident area entry/exit control, crowd and traffic control, evacuation planning and execution, and the protection of government property, and
- Coordinating with local law enforcement officials as necessary.

3.2.1.7 Staff Judge Advocate

Responsibilities of the Staff Judge Advocate include:

- Responding to oil spill/hazardous substance releases at the request of the QI or IC,

- Ensuring that information, records, and samples adequate for legal purposes are obtained and safeguarded for future use, and
- Advising the QC and IC on all the legal aspects of spill response.

3.2.1.8 Military Police

Personnel in this category are most likely individuals providing general installation support, but not assigned to a specific petroleum storage or handling area; these are individuals who would most likely witness or discover a spill. The Military Police are responsible for:

- Notifying the JBLE-Eustis FES upon discovery of an oil spill,
- Providing basic descriptive information such as, estimated size of spill, type of product, location, time of discovery, source of spill (if known), name and telephone number,
- Warning others at the spill site and meets arriving emergency response vehicles to direct them to the spill area,
- Directing all bystanders upwind and to an area outside the exclusion zone, especially if there are flammable or toxic fumes associated with the spill, and
- Standing by and supporting the IC upon their arrival to the incident site.

3.2.1.9 Discoverer

The discoverer (person who discovers the spill or release) is responsible for:

- Notifying the JBLE-Eustis FES upon discovery of an oil or hazardous substance spill,
- Taking immediate action to assess the source of the spill and initiate appropriate measures, if safe to do so, to stop the flow and contain the spill until reinforcing help can arrive,
- Requesting nearby personnel, as necessary, to limit the effects of the spill and to minimize the possibilities of fire or explosion,
- Responding defensively at a distance to limit the spill pathway and prevent exposures in the event of a spill,
- Warning others at the spill site and meet arriving FES vehicles to direct them to the spill area,
- Making sure that non-essential personnel are evacuated from the area of the spill site, and
- Initiating immediate recovery and mitigation efforts, after the spill has been contained and emergency conditions no longer exist in the case of manageable spills in the oil storage and handling areas.

3.2.1.10 Oil Spill Removal Organization

JBLE-Eustis FES may request outside support depending on the type and severity of the spill and the capability of internal resources.[19] The on-site FRT will evaluate if an OSRO needs to be notified in the event of an oil spill/hazardous release (i.e., reportable quantity spill occurs that requires further assistance). The OSRO will work under operational control of the IC and contractual control of the QI. The OSRO will perform the following duties:

- Assessing the situation, identifying the spill material involved, and coordinating with FES, CEIE and CES on proper personal protective clothing and equipment to use in working in the area of the spill,

[19] 40 CFR Part 112 Appendix F 1.7.1

- Coordinating with the CEIE, CES, and FES, on a proper recovery and mitigation strategy to employ in recovering the spilled material,
- Assisting the IC, as needed, further controlling the spill material during recovery efforts, and
- Coordinating an appropriate testing and analysis program with the CEIE when spill cleanup has been completed. Ensuring that effective recovery and mitigation efforts have occurred at the spill site.

3.2.2 Information Dissemination[20]

3.2.2.1 Personnel Information Dissemination Responsibilities

Internal and external information dissemination responsibilities are described below.

Discoverer

The discoverer (person who discovers the spill or release) is responsible for the following communication efforts:

- Notifying the JBLE-Eustis FES upon discovery of an oil or hazardous substance spill,
- Requesting nearby personnel, as necessary, to limit the effects of the spill and to minimize the possibilities of fire or explosion,
- Responding defensively at a distance to limit the spill pathway and prevent exposures in the event of a spill, and
- Warning others at the spill site and meet arriving FES vehicles to direct them to the spill area.

Public Affairs Office

Notification of and interaction with the media will be the responsibility of the Public Affairs Office. The Public Affairs Officer's responsibilities include:

- Maintaining a list of local television and radios stations for evacuation notices.[21]
- Providing continuing assistance to the QI and IC in matters pertaining to public affairs,
- Coordinating press release and information matters with the QI and IC to ensure accuracy and responsiveness,
- Providing focused informational programs concerning the spill to installation housing areas and to off-post civilian communities affected by the spill pathway, as appropriate,
- Receiving status updates from the IC regarding the spill event and on-going clean-up efforts.
- Clears public information and status report releases to higher headquarters and the media with the installation's Chief of Staff, and
- Photographing ongoing spill response activities for documentation.

Incident Commander

The IC is responsible for the following information dissemination responsibilities:

- Recalling FRT responding to the spill/release.
- Directing JBLE-Eustis on-site emergency response personnel containment, mitigation, and clean-up activities.
- Coordinating activities with the designated State and/or Federal OSC.

[20] 33 CFR §154.1035(e)(4)
[21] 40 CFR Part 112 Appendix F 1.3.1

- Providing information to the QI and Public Affairs Officer.

Qualified Individual

The QI has the following information dissemination responsibilities:

- Contacting appropriate individuals on the FRT.
- Notifying appropriate federal, state, and local agencies, as appropriate.
- Placing the OSRO on alert and notifying the OSRO to mobilize, as appropriate.
- Providing information to the Public Affairs Officer.

3.2.2.2 Information Dissemination Processes

Internal Mobilization

Mobilization in response to a spill begins upon a report of a spill via **911** (alternate number: **757-878-1008**). The person reporting the spill (discoverer or designee) should relay pertinent information including which resources are already in place addressing the spill. The dispatcher will assess the type of spill from the information provided. The FES will dispatch appropriate personnel to the site.

External Mobilization

The QI and IC will decide, based on available information, if it is necessary to contact the contracted OSRO to respond to the release. Due to the number of sensitive environments potentially affected by a major release at JBLE-Eustis, this notification will be completed early in the response process. The QI, IC, or designee will communicate with the OSRO.

External Notification

As stated in Section 3 of this Annex, the QI will delegate or perform notifications and communications with local emergency management agencies. The status of the notifications will be provided to the QI on a continuing basis.

Internal Communications[22]

Mobile radios (i.e., hand-helds) are the preferred means of communication for response personnel. The mobile radios provide flexibility and reliable communication even at remote spill locations. The installation telephone system, including the use of cellular telephones is an alternate and reliable communication system at the installation. The QI and IC have full authority to designate the use of an alternate method of communications if a more effective method of communication is warranted.

External Communications

Telephone calls are the primary method used for contacting local officials and regulatory agencies. The contact numbers used for spill incidents are provided in **Annex 2**. If an immediate danger exists, and the appropriate local official cannot be reached by means of telephone, the QI will designate a courier to initiate contact.

The release of general information to the public and the news media is conducted through the Public Affairs Officer.

[22] 33 CFR 154.1035(e)(4)

3.2.3 Safety

3.2.3.1 Installation Safety Office

The Installation Safety Office provides full-time on-site assistance as requested by the IC to make sure that spill control and cleanup operations are conducted safely. Responsibilities of the Installation Safety Office Director include:

- Providing guidance, as appropriate, with the MEDDAC's Safety/Health Plan,
- Verifying that proper protective equipment is available and used by all cleanup personnel, and
- Providing Safety Data Sheets (SDSs) as required.

3.2.3.2 Preventive Medicine Representative – Medical and Dental Administration

The MEDDAC Preventive Medicine Representative develops and executes a site-specific safety and health plan and MEDDAC Safety/Health Plan.[23] The Preventive Medicine Representative is responsible for:

- Providing immediate full-time on-site assistance to the QI and IC in all matters pertaining to medical care, treatment, evacuation, and public health of response and indigenous personnel affected by the discharge,
- Coordinating and conducting field monitoring and sampling activities, as warranted and as directed by the IC, to assess the level of risk. Recommends the proper protective clothing and equipment selection, and
- Coordinating with the QI and IC and the CEIE to identify limits of restricted access zone. Serving as advisor to the QI and IC and CEIE for health-related matters at the spill site.

3.2.4 Liaison – Staff Mobilization

Internal Mobilization

Mobilization in response to a spill begins upon a report of a spill via **911** (alternate number: 757-878-1008). The person reporting the spill should relay pertinent information including which resources are already in place addressing the spill. The dispatcher will assess the type of spill from the information provided. The FES will dispatch appropriate personnel to the site. The IC will perform a site evaluation and assess the appropriate course of action. This procedure serves to unify command during the response process, and ensures that duplicate assets are not mobilized for a particular incident.

External Mobilization

The QI and IC will decide, based on available information, if it is necessary to contact the contracted OSRO to respond to the release. Due to the number of sensitive environments potentially affected by a major release at JBLE-Eustis, this notification will be completed early in the response process.

HEPACO, Inc. (HEPACO) is a USCG-classified OSRO (OSRO #32) for inland rivers and canals and for inland/nearshore areas in the Hampton Roads District. It is capable of responding to maximum most probable discharge and worst case discharge scenarios from facilities and vessels in USCG Sector Hampton Roads. HEPACO has vehicles that are pre-loaded with equipment in the Norfolk/Hampton Roads area and this equipment can be ready for deployment within 30

[23] 33 CFR §154.1035(e)(5)

minutes of notification during regular working hours. HEPACO indicates that these vehicles would be ready for deployment during off-duty hours within 2 hours of notification.[24] HEPACO can provide pollution standby and/or containment booming services to meet the U.S. Coast Guard 1-hour response requirement.

3.3 Incident Response Operations[25]

This section describes the command aspects of JBLE-Eustis response management system that will be used in the event of an incident.

3.3.1 Procedures for Establishment of Objectives and Priorities

The immediate objectives and priorities for spill response are completed by persons reporting the spill. Procedures for the completion and priorities for a spill will be site and spill specific, and based on the judgment of the persons present at the time of the spill.

The individual(s) reporting the spill ensure the safety of personnel through restricting access to the spill area and/or evacuation of the spill area. The IC ensures that appropriate safety precautions are implemented to protect response personnel and any additional personnel located in close proximity to the probable spill route or impact area. Safety precautions include restricting access to the area, use of personal protective equipment, and evacuation. If the source of the spill can be safely contained without threat to human health and safety, the environment, or property, the initial response actions include stopping the flow.

The Fire Chief has the overall responsibility, and maintains site command and control of incidents at JBLE-Eustis. The Fire Chief will act as JBLE-Eustis IC and has the control, containment, cleanup and reporting responsibilities associated with an incident. Contact information for the Fire Chief follows:

Fire Chief, Mr. Dale Hankins
JBLE-Eustis, Virginia 23604-5000
(Direct Work Line) **757-878-4218**
(24 hour) **757-878-1008 or 911**

In the absence of the IC, a designated alternate will perform the duties of the IC. The IC has full authority to implement spill removal operations. The QI has the contracting authority to engage outside resources. During spill events, the Fire Chief heads the FRT and serves as the IC. FES Base Station, Building 648, serves as the fixed Command Post for all emergency operations. The FES Base Station has sufficient communication assets, including radios, telephones, and cellular telephones that can be used to coordinate tactical actions, as well as coordinating with supporting elements of the FRT and notifying organizations and agencies outside of JBLE-Eustis.

3.3.2 Discharge or Release Control

An event-specific Command Post will be established at the discretion of the QI or IC. The exact location will depend on the size, nature, and potential impact of the discharge and/or spill. The QI or IC will strategically position an onsite incident Command Post to provide the greatest flexibility in dealing with the incident.

In addition to the duties associated with spill response, the IC is responsible for the following:

- Maintaining and implementing the ICP by:

[24] 40 CFR Part 112 Appendix F 1.3.4
[25] 40 CFR Part 112 Appendix F 1.7.1

  - Maintaining personnel health and safety,
  - Containing the source of a spill, and
  - Protecting sensitive areas.
- Managing overall incident response operations,
- Evaluating the nature of the incident, the threat posed by the incident, and the appropriate levels of response,
- Maintaining personnel safety at the highest level possible throughout an entire incident,
- Providing employee training related to incident response measures,
- Maintaining adequate supplies of spill cleanup equipment (**Attachment 3C),**
- Serving as the primary contact with federal and state on-scene coordinators,
- Monitoring and evaluating the effectiveness of response operations,
- Approving requests for outside resources, and
- Confirming that response actions are documented.

In responding to an incident, the IC will perform the following:

- Take immediate action to control and contain the release or spill,
- Confirm that the required notifications are made,
- Coordinate the prompt mobilization of appropriate personnel, materials, and equipment,
- Establish an incident Command Post (if necessary),
- Coordinate and direct the disposal of spill material, if any, and
- Coordinate all reports and associated documentation of spill response operations.

The IC has an immediate emergency action staff available that is made up of key operational personnel from JBLE-Eustis. The staff and the FRT, are activated by the IC, and upon activation, they work under the supervision of the IC.

If a spill occurs on land or is confined to a secondary containment area, the QI or IC will mobilize cleanup resources through the FRT, with support from FES. Equipment and supplies maintained on JBLE-Eustis will be used for this category of spills. If outside resources are required, the QI and IC will request additional support from the primary response contractor, HEPACO, who can deploy vacuum trucks, additional cleanup crews, and supplies to the spill site.

For spills on water, the JBLE-Eustis has boom stocks and personnel trained to deploy the boom within 1 hour of spill notification.[26] The installation maintains at least 1,000 feet of boom at Third Port and has vessels at the port capable of assisting FES boats with the deployment of boom. [27] Boom is prepositioned on a reel at the end of the Third Port pier for ease in deployment. FES or Third Port boats can be used to pull the boom off the reels and directly into the water at Skiffes Creek. HEPACO will be contacted if additional boom and/or deployment vessels are required.

3.3.3 Assessment and Monitoring

If the spill threatens Skiffes Creek, Blows Creek, Warwick River, James River, other tributaries, or any installation wetlands area, the IC will activate the FRT, and if necessary, the OSRO will be alerted. The FRT can be sized according to the magnitude and potential of spill effects. Each FRT member has his/her own office's full capability to apply to the emergency mission. The QI will

[26] 40 CFR Part 112 Appendix F 1.5.1
[27] 40 CFR Part 112 Appendix F 1.5.1

ensure that the necessary notifications and reports are made to Federal, State and local authorities, usually via delegation to the CEIE Spill Program Manager.

With the assistance of the FRT, the QI and IC will make a complete assessment of the spill, develop a cleanup strategy, and assign tasks to appropriate FRT members or to spill site facility supervisors or managers. The IC will continue to direct response activities until the recovery and cleanup mission is completed or until relieved of the responsibility.

The IC and the FRT will initially focus on stopping the flow and containing the spill. Spill cleanup will begin only after these initial priority actions have occurred. After completing the notifications and when the response is underway, the IC will begin to focus on details of the response, including organization, assessment, establishment of priorities, and environmental considerations.

3.3.4 Containment

Every effort should be made to prohibit spilled product from entering drainage systems and waterways. Spill kits are located throughout the installation that contain booms, pads and other means of blocking spills from flowing into storm drains or conveyance systems. The FES has at least two boats available to deploy containment booms for spills that have reached waterways. Boom stocks are maintained at by JBLE-Eustis. Additional boats are available from the Harbormaster, Outdoor Recreation, and other installation tenants.

3.3.5 Recovery

On land, trenching or berm/dike construction can assist in confining spills to a limited area. When pooled fuel results from a spill, proper disposal and recovery procedures will be initiated to collect the product for later disposal. The Installation Safety Director, an FRT member, should be on-site during this type of recovery operation.

3.3.6 Remediation/Decontamination

After the product is recovered, the contaminated area will be layered and wiped with absorbent pads and materials to collect as much product residue as possible. CEIE and CES will provide guidance and direction how to remove, collect, and analyzed contaminated soil. The contaminated soil will be turned over to an authorized waste disposal contractor along with other contaminated waste and recovered product resulting from cleanup of the spill. Installation personnel and equipment and assets from the OSRO will be coordinated by the QI and IC to make sure that priorities are addressed and recovery and remediation efforts are synchronized in accordance with the cleanup strategy and plan. The process of removing and neutralizing contaminants that have accumulated on personnel and equipment is an integral part of the emergency response incidents involving hazardous materials. JBLE-Eustis decontamination program is intended to successfully meet the following requirements:

- Protect workers from hazardous substances that may contaminate and eventually permeate the protective clothing, respirator equipment, tools, vehicles, and other equipment used on-site,
- Protect all facility personnel by minimizing the transfer of harmful materials into clean area,
- Help prevent mixing of incompatible chemicals, and
- Protect the community by preventing uncontrolled transportation of contaminants from the site.

Decontamination consists of physically removing contaminants or changing their chemical nature to innocuous substance. The extent of decontamination needed depends on a number of factors,

the most important being the type of contaminants involved. The more harmful the contaminant, the more extensive and thorough decontamination must be.

Recovery and remediation efforts in wetlands should be coordinated with federal and state authorities by CEIE, prior to entering this type of environment.

3.3.7 Non-Responder Medical Needs

Injured personnel will be triaged by JBLE-E FES and will be transported, if appropriate, via ambulance to Bon Secours Mary Immaculate Hospital, 2 Bernardine Drive, Newport News, Virginia.

Local ambulance services will be activated by calling **911** and requesting emergency service outside of JBLE-Eustis.

3.3.8 Salvage Plans

This section is not required by 40 CFR Part 112 or 33 CFR Part 154.

3.4 Planning

3.4.1 Hazard Assessment and Discharge Scenarios

This portion of the ICP examines storage and transfer operations at JBLE-Eustis in an effort to predict where spills could occur and identifies potential hazards that could result. Response actions to deal with these hazards are covered in **Section 3.3 of this Annex**.

JBLE-Eustis has several separate aboveground storage sites that store and distribute bulk petroleum or oily wastewater in support of installation and tenant unit missions. There are motor pools and other maintenance facilities around JBLE-Eustis where petroleum spills could occur, albeit in smaller quantities.

General discharge scenarios are presented in **Attachment 3H**. Spill prediction pathways specific to each tank and POL storage area are described in the SPCC Plan (**Annex 9**). Response efforts are expected to minimize the effects of a small, medium, and worst case discharges. This will include preventing or minimizing discharges to surface water, ditches, and the storm sewer system. In the event of a chain reaction of failures (e.g., communication, availability of response resources), a release to land is likely to be contained within the installation and a release to water will likely flow into the James River and dissipate.

Several potential types of spills/releases can occur at JBLE-Eustis including:

- During removal and transfer of bilge wastewater from sea vessels,
- While filling ASTs,
- During off-loading activities by tank trucks,
- Natural disasters, and
- Leaks from containers (drums and totes).

These activities can potentially generate releases and are always a concern when working around petroleum-based products. JBLE-Eustis receives and stores petroleum-based products and hazardous materials that could potentially cause serious health and environmental issues if released.

System-specific schematics are provided for the Third Port Area Pier area, Felker Army Airfield, and the TVRP. Typical piping arrangement schematics are provided for tanks with fuel dispensers. Typical piping arrangement schematics are also provided for tanks associated with generators,

furnaces, and fire suppression system engines. Schematics are not provided for used oil tanks since there is no piping associated with these types of tanks. The following schematics showing the piping layout for JBLE-Eustis tank systems are provided in **Attachment 3D**.[28]

- Schematic 1. Third Port Area Pier System Schematic[29]
- Schematic 2A. Felker Army Airfield Fuel System Schematic (Existing, Expected to be Demolished in 2021/2022)
- Schematic 2B. Felker Army Airfield Fuel System Schematic (System Under Construction in 2021)
- Schematic 3. Tactical Vehicle Refueling Point Schematic
- Schematic 4. Typical Piping Arrangements for Tanks with Fuel Dispensers
- Schematic 5. Typical Piping Arrangements for Emergency Generator Tanks, Fuel Oil Tanks, and Fire Suppression System Tanks

The installation takes many steps to prevent spills and leaks by:

- Using proper containers,
- Training personnel on spill prevention techniques,
- Inspecting containers on a daily and weekly basis, and
- Following proper procedures when using and transferring substances.

Inspections and spill drills are performed regularly to reinforce proper oil handling procedures. Each drill reinforces the importance of protecting officers, soldiers, installation personnel, civilians, emergency responders, and the local environment in close proximity to the incident. If a spill is encountered by an inexperienced person with no knowledge of handling procedures, the area should be immediately evacuated. Appropriate installation personnel should be notified once at a safe location away from the spill.

A spill may present numerous hazards depending on the substance spilled. FES and CEIE have access to SDSs for materials stored at JBLE-Eustis. Hazards associated with diesel fuel, Jet A, and gasoline typically include:[30]

- Skin and eye irritation
- Flammability
- Carcinogenicity
- Systemic and central nervous system toxicity
- Inhalation toxicity
- Aspiration hazard
- Reproductive toxicity

Potential emergencies at the installation include:

- Fire
- Explosions
- POLs discharged onto land or into the water supply or river

[28] 40 CFR Part 112 Appendix F 1.4.1
[29] 33 CFR §154.1035(e)(1)(iii)
[30] 40 CFR Part 112 Appendix F 1.3.5; 33 CFR §154.1035(e)(1)(iv)

- Contamination of individuals who come in contact with the spilled substance.

The installation's spill response procedures are designed to minimize the risk of emergencies as a result of a spill or, at the very least, reduce the degree of the hazard.

3.4.2 Vulnerability Analysis[31]

3.4.2.1 Horizontal Range of a Potential Spill[32]

Secondary containment dikes at the installation will in almost all cases prevent the horizontal migration of a spill. Attenuations of any spilled material which might escape a diked area would be accomplished through the implementation of spill response activities by: (1) Installation personnel, or if necessary, (2) one or more of the spill response contractors listed in this Plan.

3.4.2.2 Vulnerability to Natural Disasters[33]

All storage tanks and ancillary piping are fabricated in compliance with rigorous nationally recognized design specifications. The specifications include wind-load allowances (must withstand minimum 100 mph wind) and recognition of any applicable seismic considerations. These factors minimize the risk of vulnerability to natural disasters. The most significant natural disaster threat to the installation would come in the form of hurricanes. JBLE-Eustis is well protected from receiving a direct impact from a hurricane by its location and surrounding land masses, and though flooding may be of concern, almost all of the installation's oil storage capacity is well above sea level, and protected from flooding by tidal marshes. The oil storage areas have not been threatened by natural disasters in recent history and it would take a direct impact from a very large hurricane traveling directly up the James River to cause any significant damage to the installation.

3.4.2.3 Tank Age[34]

JBLE-Eustis is over 100 years old. Dates of installation of all tanks are not known; however, the oldest known tanks on the installation were installed in 1995. Regardless of the age of the equipment or facility, a rigorous inspection program is in place to minimize the potential for a spill. The frequency and type of inspections comply with the SPCC Plan (**Annex 9**); STI SP001, Standard for the Inspection of Aboveground Storage Tanks; Air Force Instruction (AFI) 32-7044, Storage Tank Environmental Compliance; and USEPA requirements.

3.4.2.4 Vulnerability of Human Health

Fire and explosion are hazards involved in the handling and storing of fuels. Chemical clouds formed as a result of an explosion may settle to the ground and accumulate in dangerous quantities low-lying areas. The danger area exists not only in the immediate vicinity of the product, but may extend downwind, depending on weather conditions. Fuels can be ignited by static or friction sparks, hot exhaust pipes, lighted cigarettes, electrical devices, and similar ignition sources. The following vulnerability analysis addresses a worst case scenario involving a petroleum spill.

3.4.2.5 Vulnerability of Residential and Commercial Areas[35]

JBLE-Eustis is partially isolated from neighboring civilian communities, except for the northern and eastern borders of the installation. The City of Newport News is directly east of JBLE-Eustis

[31] 40 CFR Part 112 Appendix F 1.4.2, 1.4.3
[32] 40 CFR Part 112 Appendix F 1.4.3
[33] 40 CFR Part 112 Appendix F 1.4.3
[34] 40 CFR Part 112 Appendix F 1.4.3
[35] 40 CFR Part 112 Appendix F 1.4.2

and is separated from the military installation by the Warwick River. Spills from JBLE-Eustis facilities would not immediately result in significant damage to surrounding civilian property or threaten neighboring communities, including any medical facilities in the areas. The main threat to private property relates to a large spill in the tidal reaches of Skiffes Creek, which empties into the James River or by smoke pollution in the event of a large fire. The James River at JBLE-Eustis is heavily influenced by tidal action originating in the Chesapeake Bay. On an outgoing tide, a worst case spill could possibly affect areas near Newport News and Hampton Roads. Waterfront industries and major shipyard facilities at Newport News could also be affected. On an incoming tide, private properties along the James River and the Skiffes Creek area could also be affected.

While JBLE-Eustis itself is an area of economic importance, a spill at a specific area at JBLE-Eustis is not expected to affect the local economy.

3.4.2.6 Vulnerability of Wetlands and Other Sensitive Environments[36]

The JBLE-Eustis military reservation has extensive wetlands within the installation's 8,228 acres. Tidal creeks and the James River border the reservation on the east, west, and south. Large land spills or water spills could severely damage some reaches of the wetlands that border oil storage and transfer facilities from Felker Army Airfield and the Third Port areas. Wildlife in these areas would likely be at risk, unless measures were taken to keep them away from the spill area. A major water spill presents the greatest potential for damage to the environment at JBLE-Eustis, because of the tidal conditions of bordering waterways. An incoming tide could push spilled product back into wetland areas associated with Skiffes Creek and the James River, and game fish and waterfowl could be coated with lethal quantities of spilled products.

3.4.2.7 Vulnerability of Fish and Wildlife[37]

Fish and Shellfish

Large land spill or water spills could affect fish and shellfish in and around JBLE-Eustis.

According to the INRMP, nearly 40 species of fish were identified at JBLE-Eustis, including

- Bay anchovy
- Atlantic menhaden
- Spadefish
- Black bullhead
- Pumpkinseed
- Bluegill
- Silversides
- Bass and catfish
- Striped mullet
- Golden shiner
- Crappies and perch
- Atlantic needlefish

[36] 40 CFR Part 112 Appendix F 1.4.2
[37] 40 CFR Part 112 Appendix F 1.4.2, 1.5.1.2

Shellfish and oyster management areas are located in the James River between 4 and 10 miles south of Mulberry Island. According to the INRMP and other sources, crustaceans and shellfish in waters adjacent to JBLE-Eustis include:

- Mussels
- Crayfish
- American and Eastern oysters
- Blue crabs

A list of fishes and shellfish known and expected to occur at JBLE-Eustis and, thus, in the vicinity of JBLE-Eustis, is presented in the INRMP.

The Atlantic sturgeon, an endangered species, was found to have returned to the James River in 2018.

(Sources: INRMP, Friends of the James River Park, Virginia Department of Game and Inland Fisheries Virginia Fish and Wildlife Information Service [VAFWIS]).

Animals

According to the INRMP, the following animals have been identified on the installation:

- Mice, rats, voles, and shrews
- White-tailed deer
- Rabbits, groundhogs, and gray squirrels
- Raccoons and opossums
- Red and gray foxes and coyotes
- Muskrats, river otters, and beavers
- Bats

A complete list of mammals known and expected to occur at JBLE-Eustis and, thus, in the vicinity of JBLE-Eustis, is presented in the INRMP.

According to the INRMP, birds known to be on the installation and in the area include:

- Rock and mourning doves
- Bobwhite quail
- Woodpeckers
- Blue jays and crows
- Chickadee, tufted titmouse, wrens, sparrows, thrush, warblers, and finches
- Robins, starlings, mockingbirds, red-winged blackbirds, bluebirds, and indigo bunting
- Canada geese, wood ducks, mallards, loons, and common goldeneye
- Herons, egrets, rails, sandpipers
- Hawks, kestrels, owls, and eagles

A list of birds known and expected to occur at JBLE-Eustis and, thus, in the vicinity of JBLE-Eustis, is presented in the INRMP.

Large land spills or water spills could affect sea birds, waterfowl, and shorebirds, as well as birds of prey. During migration periods, there is a particularly heavy traffic of sea birds near JBLE-Eustis.

A list of migratory birds protected by the Migratory Bird Treaty Act and the seasons when they may be present are also identify by the FWS IPaC. Refer to https://ecos.fws.gov/ipac/ for current lists.

Reptiles and Amphibians

According to the INRMP, a variety of reptiles and amphibians are known to inhabit JBLE-Eustis. These include:

- Snakes, including the northern water snake, eastern rat snake, northern black racer, eastern garter snake, and rough green snake
- Turtles, including the common snapping turtle, northern red-bellied cooter, eastern mud turtle, and woodland box turtle
- Lizards, including the ground skink and five-lined skink
- Frogs and toads, including the green frog, Coastal Plains leopard frog, spring peeper, green tree frog, upland chorus frog, Fowler's toad, and American toad
- Salamanders including marbled salamander, red-backed salamander, and red-spotted newt.

A list of the reptiles and amphibians found at JBLE-Eustis, and thus likely in the area, is presented in the INRMP.

3.4.2.8 Vulnerability of Endangered Flora and Fauna[38]

Large land or water spills could affect endangered species. The Virginia DGIF identified over 600 known or likely to occur species of concern for conservation in the vicinity of JBLE-Eustis. Listed and candidate endangered and threatened wildlife that may be present in the JBLE-Eustis area includes bald eagles, northern long-eared bat, rustypatched bumble bee, spotted turtle, tricolored bat, sea turtles, and Atlantic sturgeon.

A listing of Federal and State listed threatened and endangered species in the vicinity of JBLE-Eustis is located in **Attachment 3K** (Sources: VAFWIS, IPac).

Large land or water spills could affect endangered flora. Numerous listed and candidate endangered and threatened plant species may also be found on the installation or in the area, particularly the marshes and wetlands surrounding the James River area.

Endangered flora include sensitive join-vetch and small whorled pogonia. A listing of Federal and State listed threatened and endangered plant species in the vicinity of JBLE-Eustis is located in **Attachment 3K** (Sources: VAFWIS, IPaC).

3.4.2.9 Vulnerability of Historical Areas[39]

Large land or water spills could damage historical areas such as shorelines adjacent to the Historic Jamestowne/Jamestown Settlement, Jamestown Historic Ship Museum, the Archaearium Archaeological Museum, Chippokes Farm and Forestry Museum, and Carters Grove Plantation site. Information on vulnerability of historical areas was obtained from VDCR and the ICRMP. A map showing VDCR areas designated for cultural and historic preservation is included in **Attachment 3L**.

[38] 40 CFR Part 112 Appendix F 1.4.2
[39] 40 CFR Part 112 Appendix F 1.4.2

3.4.2.10 Vulnerability of Public Areas[40]

Large land or water spills could damage public areas including parks and open public spaces, marinas, and wildlife management areas. These areas are listed below:

Recreational Areas and Open Public Spaces

- Huntington Beach (James River)
- James River Country Club (James River)
- Kingsmill Resort (James River)
- Riverfront Park and Hilton Fishing Pier (James River)
- Riverview Farm (park, pier, and beach) (James River)
- Colonial Parkway (James River)
- College Creek Beach (James River)
- Powhatan Indian Village (James River)
- Chippokes Plantation State Park (James River)

Marinas

- Denbigh Boat Ramp (Warwick River)
- Huntington Park Municipal Boat Ramp (James River)
- James River Marina (Deep Creek)
- Menchville Marina (Deep Creek)
- Deep Creek Landing Marina (Deep Creek)
- Warwick Yacht and Country Club (Deep Creek)

Wildlife Management Areas

- Hog Island Wildlife Management Area (James River)
- Ragged Area Wildlife Management Area (James River)

The following maps that show wetalands areas and marinas are included in **Attachment 1B:**

- National Wetlands Inventory – James River Area
- National Wetlands Inventory – JBLE-Eustis Area
- James River Area Recreational Use Map

3.4.2.11 Vulnerability of Schools and Child Care Facilities[41]

A child care center and elementary school are located on JBLE-Eustis. The closest schools outside of JBLE-Eustis are in Newport News, Virginia. The schools and child care centers would not be threatened by spill occurrences at JBLE-Eustis, but they could be impacted by smoke pollution in the event of a large fire. Schools in the vicinity of JBLE-Eustis are listed below.

Child Care/Development Centers

- A Heavenly Haven Child Development Center (Warwick Boulevard, west of Route 60)
- Beginnings Academy of Learning (Warwick Boulevard, east of Route 60)

[40] 40 CFR Part 112 Appendix F 1.4.2
[41] 40 CFR Part 112 Appendix F 1.4.2

- Holy Tabernacle Christian Child Development Center (Warwick Boulevard, west of Route 60)
- Joyful Horizons Day Care (Warwick Boulevard, east of Route 60)
- Loving Care Child Care (Dunmore Drive, west of Route 60)
- Kiddy City Day Care (Warwick Boulevard, west of Route 60)
- Madison Child Development Center (Madison Avenue, JBLE-Eustis)
- New Beginning Child Care (Warwick Boulevard, east of Route 60)
- Warwick River Christian Preschool and Learning Center (Lucas Creek Road, west of Route 60)
- Denbigh Early Childhood Center (Warwick Boulevard, east of Route 60)

Elementary Schools

- BC Charles Elementary School (Menchville Road, west of Route 60)
- Dutrow Elementary School (Curtis Tignor Road, west of Route 60)
- Epes Elementary School (Hughes Drive, west of Route 60)
- General Stanford Elementary (Madison Avenue, JBLE-Eustis)
- Hilton Elementary School (River Road, adjacent to James River)
- RO Nelson Elementary School (Moyer Road, west of Route 60).
- Sanford Elementary School (Colony Road, west of Route 60)

Middle Schools

- JM Dozier Middle School (Industrial Park Drive, west of Route 60)
- Passage Middle School (Atkinson Way, west of Route 60).

High Schools

- Denbigh High School (Denbigh Boulevard, west of Route 60)
- Menchville High School (Menchville Road, west of Route 60)

The following facilities are also gathering places for children and youth:

- Youth and Teen Sport Center (Pershing Avenue, JBLE-Eustis)
- Denbigh Community Center (Warwick Boulevard, east of Route 60)
- Jamestown 4-H Educational Center (4-H Club Road, adjacent to James River)

3.4.2.12 Vulnerability of Water Sources[42]

Surface drainage from JBLE-Eustis is primarily south, east and west. There are six active non-potable groundwater wells at JBLE-Eustis. Well locations are listed in the Table below and shown on **Figure 4** (**Annex 1)**.

[42] 40 CFR Part 112 Appendix F 1.2.3, 1.4.2

Table A3-1. JBLE-Eustis Water Supply Wells

VDEQ Well Number	JBLE-Eustis ID	Latitude and Longitude	Date Installed
216-00003	#1 Sand Pool (Building 1132)	37º 08' 45.90" N 76º 34' 18.20" W	2/27/1941
216-00071	#5 Duck Pond (Building 439)	37º 09' 49.30" N 76º 36' 19.30" W	3/31/1986
216-00072	#6 Golf Course (Building 3537)	37º 08' 9.80" N 76º 35' 49.40" W	03/31/1992
216-00070	#7 Leadership Course	37º 06' 56.30" N 76º 34' 33.50" W	07/18/1989
216-00095	#8 Building 3904	37º 06' 47.36" N 76º 34' 36.10" W	06/14/2004
216-00096	#9 Range 5 Latrine	37º 06' 44.03" N 76º 34' 28.65" W	11/10/2006

JBLE-Eustis receives its drinking water and fire fighting water supply from the Newport News Waterworks in Newport News, Virginia. According to the Newport News Waterworks, water is drawn from two wellfields (Lightfoot Wellfield and Lee Hall Wellfield), the Chickahominy River, and several reservoirs (Little Creek Reservoir, Diascund Reservoir, Lee Hall Reservoir, Harwood's Mill Reservoir, and Skiffes Creek Reservoir). The Lee Hall Reservoir and Lee Hall Wellfield are closest to JBLE-Eustis, located less than 1 mile east of the JBLE-Eustis Main gate. The Skiff's Creek Reservoir is located approximately 2 miles north of the JBLE-Eustis main gate.

Both reservoirs have dams that would protect the water source from possible contamination from an oil discharge from JBLE-Eustis, which is located downstream. The other sources of water for Newport News Waterworks are located further inland to the north and east. The reservoirs or wells north of JBLE-Eustis would not be affected by sub-surface drainage from the installation.

3.4.2.13 Vulnerability of Transportation Routes (Air, Water, Land)[43]

Air traffic (military use only) at JBLE-Eustis could be affected by smoke from a fire on Base. If necessary in a worst case discharge, air traffic could be diverted to JBLE-Langley.

The James River is used as a water transportation route, particularly in the vicinity of Newport News and Norfolk. A worst case discharge to the James River or smoke could affect commercial, military and recreational vessel traffic.

JBLE-Eustis is located west of Interstate 64 and Highway 60. These roads may be affected by smoke in the case of a fire, depending on the location of the fire and wind direction.

[43] 40 CFR Part 112 Appendix F 1.4.2

3.4.2.14 Utilities[44]

Natural gas lines are present on JBLE-Eustis and most buildings use natural gas as a fuel for their heating source. Some buildings are equipped with heating oil tanks. A release from a heating oil tank would affect the heating system for that building.

Electrical power is supplied to JBLE-Eustis by Dominion Virginia Power. Telephone and cable television are also installed throughout the installation. The electrical power lines, along with telephone and cable TV lines, are installed above and below ground. In the event of an explosion or fire, localized disruption in utility services could be experienced, resulting in the temporary loss of power.

Wastewater from the installation is discharged to the HRSD. In the event of a discharge that could potentially impact the wastewater stream from the installation, HRSD will be contacted.

Pipline and cable areas are present in the James River and Warwick River in the civicinty of JBLE-Eustis. These areas are shown on the navigational chart of the James River in **Annex 1 (Attachment 1B)**.

3.4.3 Prioritization of Potential Risks

Potential bulk POL spill sites at JBLE-Eustis include transfer operations at the Felker Army Airfield Terminal; Third Port; and operations at the U.S. Maritime Administration's Mulberry Point facility if mobilization of the Reserve Fleet is initiated. Spills or releases of hazardous materials or wastes may occur at the primary storage facilities.

Maintenance facilities are potential spill sites for both petroleum and hazardous substances, but the size and impact of such a spill is deemed to be much less than at the other primary facilities.

3.4.3.1 Federal Worst Case Discharge Determination

Several federal regulations require the determination of worst case discharge planning volumes. JBLE-Eustis meets the substantial harm criteria in accordance with 40 CFR Part 112, Appendix C, Attachment C-II (**Attachment 3E**). Because JBLE-Eustis is subject to regulation by both the USEPA and the USCG, a worst case discharge has been developed for both a MTR and a non-MTR facility on the installation. The higher discharge volume had been selected as the planning volume for JBLE-Eustis. These worst case discharge calculations can be found under 40 CFR 112, Appendix E (**Attachment 3F**). **Attachment 3G** provides the Worksheet to Plan Volume of Response Resources for Worst Case Discharge for JBLE-Eustis to satisfy both the USEPA and the USCG regulations.[45]

Small, medium, and worst case discharges described at JBLE-Eustis are based on the USEPA's definition under 40 CFR 112, Appendix D, Part A.2, Worst Case Discharge Planning Volume Calculation for On-Shore Storage Facilities, Multiple-Tank Facilities. The USCG and USEPA regulations provide for oil spill responses at the following similar levels:

- A worst case discharge (WCD) to the maximum extent practicable (USEPA-regulated facilities WCD);
- Discharges greater than 2,100 gallons and less than or equal to 36,000 gallons, or 10 percent of the capacity of the largest tank at the facility, whichever is less, provided that this amount is less than the worst case discharge (Medium Discharge); and

[44] 40 CFR Part 112 Appendix F 1.4.2
[45] 33 CFR §154.1029

- A discharge of 2,100 gallons or less, provided that this amount is less than the worst case discharge amount (Small Discharge).

3.4.3.2 Third Port Facility (Worst Case Discharge Scenario)[46]

The largest risk of a major spill event at JBLE-Eustis is associated with operations at the Third Port facility. Transfers of oil, oily water, or fuel over water and away from the protection of secondary containment are always a substantial risk, particularly if a hose ruptures, a pipe bursts, or a tank overfill. Furthermore, the effects of the brackish water and age of the piping at the Third Port pier increase the risk of a piping failure. The effects are almost immediate to the environment, with the release going directly into tidal waters. Severe weather, extreme tidal conditions, and the presence of other vessels could affect the response on water.

Good engineering and operational practices can minimize the risk of spills. It is crucial to have the capability to immediately respond to spill events on the water to minimize the impact on the environment.

Bilge water piping extends from the risers in vaults on the pier to the oily water tanks on land. Each vault is constructed of concrete and contains other piping (e.g., water, sewer) in addition to the oily water lines. A small release from a hose/riser connection would be contained within the concrete vault. Containment of a release from the vessel/hose connection depends on the vessel and the location of the connection (interior or exterior location). Maintenance and testing of the pier oily water piping is the responsibility of ASUS, the contract operator of the oily water treatment system.

The volume of potential spills from aboveground tanks at Third Port is relatively small, not exceeding 30,000 gallons, which is the capacity of the largest tank at that location. The Third Port facility runs in batch mode on an as-needed basis, at a rate of approximately 25 gallons per minute (gpm).

An overview of the POL storage areas is provided in **Annex 1**. General discharge scenarios are presented in **Attachment 3H**. See **Annex 3 Section 3.4.2.7** for a discussion of fish and wildlife at the installation and in the James River area. Drinking water wells or water intakes are not expected to be affected by a release at the Third Port (See **Annex 3 Section 3.4.2.12**).

Response efforts are expected to minimize the effects of a release. Spill response materials are readily available in Third Port. Additional on-base spill response equipment and resources are listed in **Attachment 3C**. Response efforts will include preventing or minimizing discharges to surface water. In the event of a chain reaction of failures (e.g., communication, deployment of response resources), a release to water will flow into the James River.

Information about contracts available to JBLE-Eustis for oil spill response support is provide in **Attachment 3I**.[47] JBLE-Eustis performs documented weekly inspections of regulated oil storage areas on the installation (See **Annex 7**). **Attachment 3J** addresses JBLE-Eustis response resources for various oil discharge scenarios.

3.4.3.3 Felker Army Airfield (Medium Release Discharge Scenario)[48]

A discharge of 30,000 gallons or less is only possible by a rupture of an AST combined with a failure of the secondary containment at the old Felker Army Airfield Fuel Terminal. A discharge

[46] 40 CFR Part 112 Appendix F 1.4.1, 1.5.1, 1.5.1.1, 1.5.1.2, 1.5.2, 1.7.1
[47] 33 CFR §154.1028
[48] 40 CFR Part 112 Appendix F 1.4.1, 1.5.1, 1.5.1.1, 1.5.1.2, 1.7.1

of 20,000 gallons or less is only possible by a rupture of an AST combined with a failure of the secondary containment at the new (2021) Felker Army Airfield Fuel Terminal. A failure of the secondary containment would allow spilled materials to enter stormwater catch basins. This would allow material to flow toward nearby on-site stormwater drains that lead to the James River. A piping leak would be contained in the containment area and migrate radially on the concrete surface.

The potential for spills is higher wherever the frequency of material transfer operations is the greatest. Felker Army Airfield conducts aircraft training operations 24 hours a day, 7 days a week. The aircraft require fuel support and delivery on the flight line. The frequency of fuel transfer operations at the airfield is far greater than any other activity at JBLE-Eustis, including the transfer operations associated with the Third Port. According to CEIE, the average daily throughput for Felker Army Airfield is 4,000 (high estimate) gallons of Jet Fuel F-24.

Most of the fuel operations at Felker Army Airfield involve fuel transfer from 5,000-gallon mobile refueler, operating out of the Fuel Terminal. Spills associated with the delivery of fuel would not exceed 5,000 gallons. Spills from the ASTs at the Felker Army Airfield Fuel Terminal would not exceed 30,000 or 20,000 gallons (depending on the Terminal), which is the capacity of the largest tank at that location. A release of 30,000 gallons at the old Terminal or 20,000 gallons at the new Terminal represents the worst case scenario at this location. The affected area would include Blows Creek, wetlands, and the tidal flats on the north bank of the James River. Extreme weather events (e.g., hurricane) would affect the response operation; although it is unlikely that fuel operations would be taking place during extreme weather events.

Releases at the old fuel terminal may result from aging infrastructure (piping, pumps, valves, fittings, etc.). Releases at the new terminal may result from leaking fittings, valves, or pumps as the new facility is exercised and structures settle.

If both a tank rupture and a secondary containment failure occurred at the same time, JBLE- Eustis personnel would attempt to safely contain the spill with the response material that is kept nearby until the FES and CEIE arrive to contain and remove the contaminated soil and water. The FES or the CEIE would assess if the OSRO needs to respond to with additional cleanup support. Additional on-base spill response equipment and resources are listed in **Attachment 3C**.

General discharge scenarios are presented in **Attachment 3H**. Spill prediction pathways specific to each tank and POL storage area are described in the SPCC Plan (**Annex 9**). See **Annex 3 Section 3.4.2.7** for a discussion of fish and wildlife at the installation and in the James River area. Drinking water wells or water intakes are not expected to be affected by a release at the Third Port (See **Annex 3 Section 3.4.2.12**).

Response efforts are expected to minimize the effects of a medium scenario release. This will include preventing or minimizing discharges to surface water, ditches, and the storm sewer system. In the event of a chain reaction of failures (e.g., communication, availability of response resources), a release to land is likely to be contained within the installation and a release to water will likely flow into the James River and dissipate. Spill response materials are located on mobile refuelers and at the fuel transfer area. **Attachment 3C** identifies the spill response materials immediately available at JBLE-Eustis.

3.4.3.4 JBLE-Eustis Area (Small Discharge Scenario)[49]

A discharge of 2,100 gallons or less is most likely to occur during unloading of a fuel transfer truck or during the refueling of a fleet truck. For this reason, fuel suppliers on JBLE-Eustis are required to follow proper transfer procedures and JBLE-Eustis personnel must be present during transfer operations. In most cases, a small discharge of fuel during tank loading activities would move slowly over soil towards a catch basin. JBLE-Eustis personnel have been instructed to be present during loading activities and follow the procedures addressed in the SPCC Plan (**Annex 9**) for tank truck deliveries. JBLE-Eustis personnel are trained to quickly assist in the containment of the spill. Spill response materials are located on mobile refuelers and at the fuel transfer areas. Additional on-base spill response equipment and resources are listed in **Attachment 3C**.

Small discharges of oily bilge water have occurred in the past, resulting in reportable releases to the James River. Vessel personnel are required to follow Standard Operating Procedures (SOPs) for transferring bilge water to the Third Port treatment facility and for ensuring hoses are thoroughly drained back to the vessel before disconnecting the hose from the vessel.

General discharge scenarios are presented in **Attachment 3H**. Spill prediction pathways specific to each tank and POL storage area are described in the SPCC Plan (**Annex 9**). See **Annex 3 Section 3.4.2.7** for a discussion of fish and wildlife at the installation and in the James River area. Drinking water wells or water intakes are not expected to be affected by a release at the Third Port (See **Annex 3 Section 3.4.2.12**).

Response efforts are expected to minimize the effects of a small scenario release. This will include preventing or minimizing discharges to surface water, ditches, and the storm sewer system. Extreme weather events (e.g., hurricane) would affect the response operation; although it is unlikely that fuel operations would be taking place during extreme weather events.

In the event of a chain reaction of failures (e.g., communication, availability of response resources), a release to land is likely to be contained within the installation and a release to water will likely flow into the James River and dissipate.

3.5 Protection of Vulnerable Receptors[50]

Operational spills at Felker Army Airfield or Third Port are infrequent, and when they do occur, the spills are contained in secondary containment or onto hardstand areas. A limited volume (several gallons) is lost when these types of spills/releases occur. Good engineering practices, routine maintenance, and constant oversight and inspections minimize the risk of spill events at the fuel transfer facilities.

JBLE-Eustis performs documented weekly and monthly inspections of oil storage areas on site (refer to **Annex 7**). If a leak or spill is detected, the employee will quickly and safely stop the product flow by closing the necessary valves. JBLE-Eustis personnel will notify FES and CEIE so that appropriate response actions are taken (refer to **ICP Section 2, Core Plan**). Ignition sources will be shut off and spilled material will be contained. Daily inspections of storage tank areas include looking at the foundation, piping, valves and secondary containment area for visual signs of deterioration or leakage of fuel. Inspection records will be maintained at each facility.

[49] 40 CFR Part 112 Appendix F 1.5.1, 1.5.1.1, 1.5.1.2, 1.7.1
[50] 40 CFR Part 112 Appendix F 1.6.2

Automated Discharge Detection[51]

The 30,000-gallon tanks at the Jet A Fuel Terminal (Felker Army Airfield) (scheduled to be abandoned) are diked single-walled tanks and are not equipped with automated discharge detection devices. The fuel piping is equipped with a leak detection system. This system senses fuel leakage in the interstitial space of the double-walled fuel transfer piping. An audible alarm is also sounded locally when a leakage is detected.

The fuel tanks at the new Felker Army Airfield Jet A Fuel Terminal and at the new TVRP are double-walled tanks and are equipped with automated discharge detection devices. The fuel piping is equipped with a leak detection system. This system senses fuel leakage in the interstitial space of the double-walled fuel transfer piping. An audible alarm is also sounded locally when a leakage is detected.

A physical barrier system is provided at the Jet A (F-24) Fuel Terminal (old and new). JBLE-Eustis' policy requires that wheel chocks be provided during the tank truck loading by installation personnel to prevent vehicle departure prior to complete disconnection of transfer lines. Verbal communications by JBLE-Eustis personnel is also required by installation personnel during tank truck loading operations.

3.5.1 Coordination with Natural Resource Trustees

The CEIE and FES will coordinate with the VDCR and VDEQ to alert them of potential impacts from a significant spill. The QI (or designee) will contact VDEQ and/or VDCR to discuss the severity of the spill. Representatives from VDEQ and/or VDCR will serve as an advisor to the QI, IC, and CEIE to assess the natural resource damage. In general, the assessment will involve some data collection during the emergency response to evaluate the natural resource impacts from the oil spill or hazardous substance release.

Telephone numbers for potential natural resource receptor areas are included in **Annex 2**.

3.5.2 Waste Management[52]

It is JBLE-Eustis' policy that clean-up materials resulting from the oil spill or release are retained until they can be recycled or disposed in an appropriate and legal manner. The disposal of contaminated materials will be in accordance with federal, state, and local requirements. Disposal of hazardous waste, universal waste, or non- hazardous waste (e.g., oil) must be coordinated with the Hazardous Waste Accumulation Facility (HWAF) Site Manager and the CEIE. The Hazardous Waste Program Manager is authorized to sign hazardous waste manifests, non-hazardous waste manifests, and bills of lading.

Disposal Procedures

The CEIE will coordinate the disposal of contaminated materials. In the event of a large spill, the OSRO, HEPACO, will assist in containing and removing contaminated soil and/or water. JBLE-Eustis and HEPACO maintain the necessary recovery equipment, provide manpower, and have the capability to temporarily store contaminated soil until proper means of disposal occurs.

Small quantities of contaminated materials and waste product will be handled according to the JBLE-Eustis Hazardous Waste Management Plan (HWMP). Wastes will be disposed in accordance with appropriate local, state, and federal requirements.

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[51] 40 CFR Part 112 Appendix F 1.6.1
[52] 40 CFR Part 112 Appendix F 1.7.2

Materials determined to exhibit hazardous waste characteristics will be prepared for disposal according to procedures outlined in the HWMP. Following containment of the spill, the FES will notify the CES Hazardous Waste Program Manager who is responsible for directing the characterization and disposal of the wastes incurred by the spill.

Non-hazardous used or spent response materials, recovered product, contaminated soil, personal protective equipment (PPE), decontamination solution, absorbents, and spent chemicals will be containerized in compatible USDOT approved containers. Wastes that are disposed of by the installation (rather than by clean-up contractors, discussed below) will be sent to the installation's HWAF.

Because JBLE-Eustis does not store hazardous waste for 90 days or longer, a Resource Conservation and Recovery Act (RCRA) Part B Permit is not necessary for JBLE-Eustis. The Defense Logistics Agency (DLA) Disposition Services ensures that transportation and disposal of hazardous wastes from JBLE-Eustis is performed by licensed contractors in accordance with federal, state, and DOD requirements. DLA Disposition Services acts as a broker for the installations waste and chooses from a list of licensed, certified, and approved transportation and disposal companies.

If spill response contractors are involved in a clean up operation, it will be the installation's decision whether to send the waste to DLA Disposition Services for disposal, as described above, or to direct the contractor to arrange for disposal.

All hazardous and otherwise regulated waste that leaves JBLE-Eustis, whether by spill response contractor or DLA Disposition Services contract, will be manifested by CES. The Hazardous Waste Program Manager ensures that all waste which leaves the installation is properly manifested for transportation and disposal before it leaves the installation and that documentation of appropriate transportation and disposal is returned to the installation from the contractor or DLA Disposition Services.

Recovered product will be reclaimed, if possible, or sold as waste fuel through DLA Disposition Services. If soil contamination is extensive, an onsite remediation program may be implemented by CES rather than off-installation disposal.

Discharges requiring assistance from contractors will be initiated by the IC, who will contact the installation Directorate of Contracting. The contracting officer chooses a contractor most appropriate for the job. Once the contractor arrives on the installation, clean up is facilitated through the CES Spill Program Manager. This person will coordinate, schedule, and oversee contractor activities including response, recordkeeping, and reporting, as well as discharge monitoring and assessment of completed decontamination of the incident area.

3.6 Logistics

3.6.1 Medical Needs of Responders[53]

Medical assistance for minor injuries is available on-site for incident responders via emergency medical technicians who are part of the JBLE-Eustis FES. Health response, monitoring requirements, and reporting requirements are contained within the Health and Safety plans, and will be supervised by the MEDDAC preventive medicine representative.

[53] 33 CFR §154.1035(e)(5)

Injured personnel will be triaged by JBLE-Eustis FES and, if appropriate, will be transported to either:

- McDonald Army Health Clinic, located on JBLE-Eustis (Building 576) for minor injuries , or
- Via ambulance to Bon Secours Mary Immaculate Hospital, 2 Bernardine Drive, Newport News, Virginia 23602, for other injuries.

3.6.2 Site Security[54]

Site security will be handled through the Military Police. If additional security is required, local law enforcement agencies will be contacted for assistance. The location and nature of the spill site may determine which jurisdiction is contacted. The JBLE-Eustis Military Police will address physical security in the event of an incident.

3.6.3 Communications, Internal and External Resources[55]

The primary communication among responders is hand-held radio. Cellular and landline telephones will serve as backup communication systems. Additional assets or resources will be pooled at the direction of the QI or IC, or contracted for by the CES Operations Element. Other communication assets will be identified and used on a per-incident basis.

3.6.4 Transportation (Air, Land, Water)

Some locations of potential spills are accessible by overland response vehicles. Although some locations could be considered as remote, none are considered inaccessible. Spills at the Third Port facility would most likely require responders to use marine transportation which could readily be supplied using JBLE-Eustis resources.

3.6.5 Personnel Support (e.g., meals, housing, equipment)

If a spill requiring a long-term effort were to occur at JBLE-Eustis, the FRT will be mobilized. As a military installation, JBLE-Eustis has the necessary resources to provide personnel support. The QI or IC will coordinate with the FRT in such an event.

3.6.6 Equipment Maintenance and Support[56]

The owners of storage areas and spill response equipment are responsible for regular maintenance and inspection of their equipment. A list of spill response equipment maintained by the JBLE-Eustis FES is located as **Attachment 3C**.[57] CEIE and FES performs routine self-inspections on response equipment. This includes the following:

- Reviewing the inventory of response equipment items and quantities,
- Checking the response items locations are appropriate,
- Checking the accessibility to response equipment, and
- Checking the condition of the item.

JBLE-Eustis units have specific command and support relationships. Military units supporting a spill response effort will be in a direct support role, unless otherwise ordered. This relationship indicates that the assets fall under the control of the QI and IC, but the support and maintenance of the assets is the responsibility of the parent unit.

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[54] 40 CFR Part 112 Appendix F 1.10
[55] 33 CFR §154.1035(e)(4)
[56] 33 CFR §154.1057
[57] 40 CFR Part 112 Appendix F 1.3.2; 33 CFR §154.1035(e)(3)(ii)

JBLE-Eustis has an OSRO available for spill response. The OSRO on contract maintains its own spill response equipment. The certification of HEPACO as an OSRO is considered adequate evidence of proper equipment maintenance and support. HEPACO's qualifications and contact information are provided in **Attachment 3I**.[58]

3.7 Finance/Procurement/Administration

3.7.1 Resource List

Lists of resources, personnel, and response and support equipment readily available at JBLE-Eustis are included as **Attachment 3C**.[59]

The spill incident log is used to document the efforts and resources spent during an incident. This would include personnel effort and response equipment used.

3.7.2 Personnel Management

Lists of resources, personnel, and response and support equipment readily available at JBLE-Eustis are included as **Attachment 3C.** [60]

3.7.3 Response Equipment

Lists of resources, personnel, and response and support equipment readily available at JBLE-Eustis are included as **Attachment 3C.** [61]

3.7.4 Support Equipment

Lists of resources, personnel, and response and support equipment readily available at JBLE-Eustis are included as **Attachment 3C.** [62]

3.7.5 Contracting

Additional emergency contracting that would be required would go through the Directorate of Contracting. The QI has the authority to commit resources. The response would be supervised by the QI, and the costs associated with the response contractor submitted to the Directorate of Contracting through the Contracting Officer's Representative. The Contracting Officer will submit the request for payment to CEIE for verification of claims.

3.7.6 Claims Procedures

The Staff Judge Advocate will provide legal counsel and guidance on environmental compliance and claims. The Staff Judge Advocate will provide legal staff support as may be necessary to carry out any of the response activities and provide claims management.

3.7.7 Cost Documentation

The Finance/Administration Section is responsible for handling all accounting services. The Finance/Administration Section will work closely with the FES to track all expenditures of the response operations. The Finance/Administration Section is led by the Finance Section Chief (FSC) and is assisted by the Time Unit Leader, Compensation/Claims Unit Leader, Procurement Unit Leader, and Cost Unit Leader.

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[58] 33 CFR §154.1028
[59] 40 CFR Part 112 Appendix F 1.3.2
[60] 40 CFR Part 112 Appendix F 1.3.2
[61] 40 CFR Part 112 Appendix F 1.3.2
[62] 40 CFR Part 112 Appendix F 1.3.2; 33 CFR §154.1035(e)(3)

The FSC, generally the Base Comptroller, is responsible for all financial, administrative, and cost analysis aspects of the incident and for supervising members of the Finance/Administration Section.

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ATTACHMENT 3A
EMERGENCY RESPONSE TEAM ORGANIZATION CHART AND SPILL RESPONSE DECISION TREE

- Figure 3A-1: Emergency Response Team Organization Chart
- Figure 3A-2: Spill Response Decision Tree

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Figure A3-1. Emergency Response Team Organization Chart

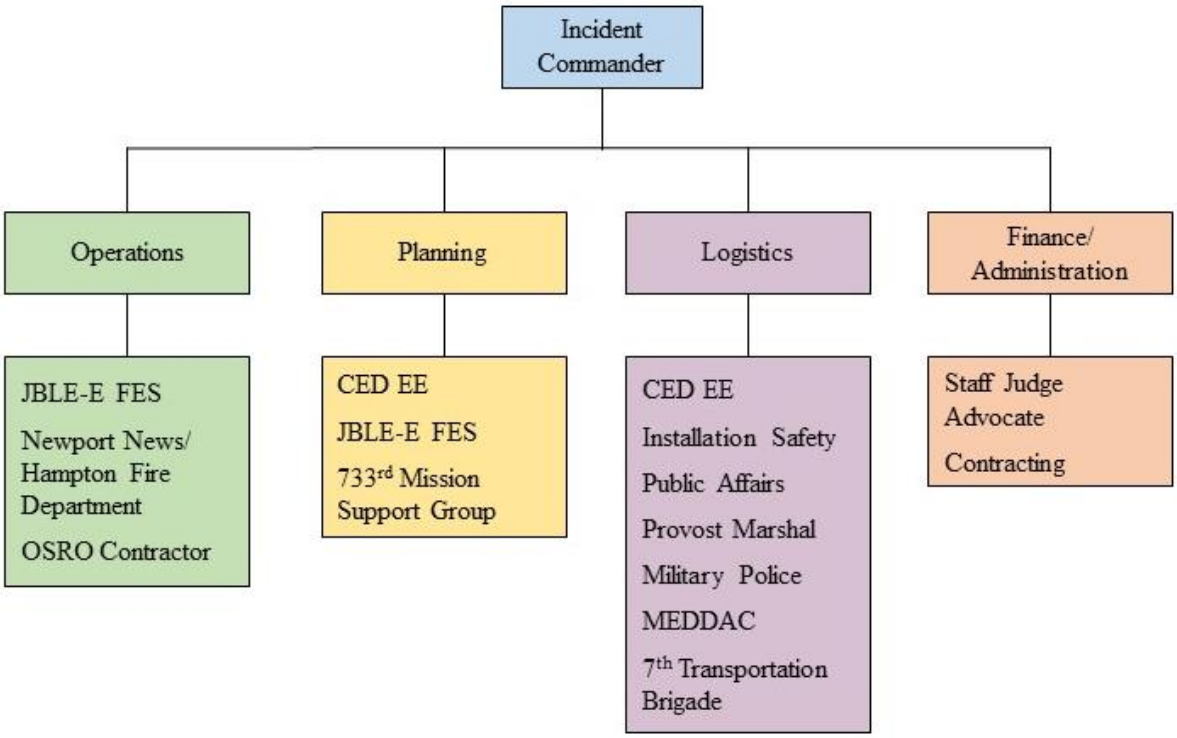
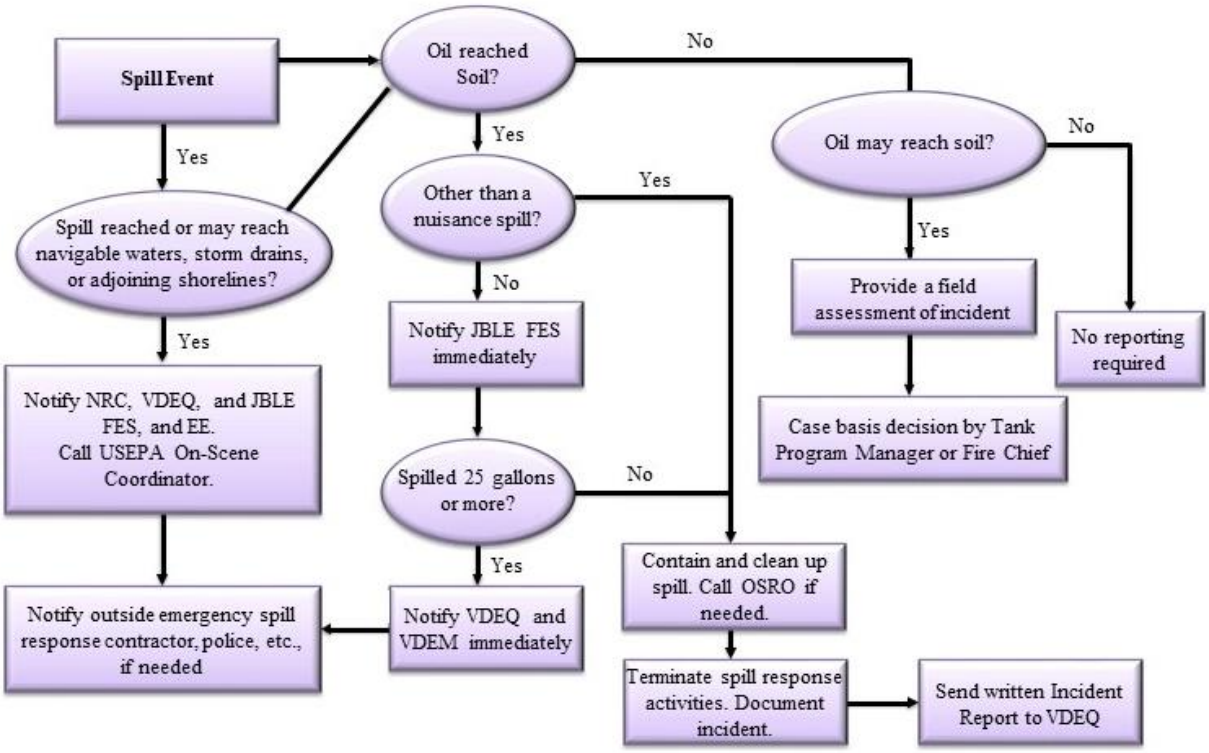


Figure A3-2. Spill Decision Tree



Note: "Oil" means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

ATTACHMENT 3B
EVACUATION PLAN

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JBLE-EUSTIS EVACUATION PLAN[63]

General

The quantities of fuel stored at the JBLE-Eustis pose potential risk to human health and life. There are numerous emergency situations where evacuation of the affected spill site and the immediate surrounding vicinity may be necessary. An emergency situation might include an accident on the installation involving a tank truck containing gasoline or Jet A fuel, spilling its entire contents onto the ground and into the storm water drainage system. In these or other situations where a large spill could occur, the Fire Chief (i.e., IC) from the JBLE-Eustis FES is the responsible person ordering the evacuation of the immediate and surrounding areas. If evacuations become necessary, the Fire Chief will contact the installation's Emergency Operations Center (EOC) (Building 1028) and issue an evacuation order or shelter-in-place order by either email and/or through the use of the installation-wide public address system ("Giant Voice").[64]

The Military Police will assist in the evacuation of threatened areas and will direct traffic to specific safe evacuation regrouping areas. Military Police have portable barricades stored at the front gate and on Patch Road. Portable barricades and police vehicles can both be used to redirect traffic.

Primary Hazards to Human Health and Safety

The potential for life threatening conditions occurring depend on the location and severity of the spill. If a fire and/or explosion destroys surrounding oil storage facilities, anchored vessels at Third Port, or refueling stations, the event may require evacuation of that area or workplace. An expeditious evacuation of the local area or facility will help prevent serious injury or death to personnel. Hazardous fumes and smoke resulting from an explosion could present a health risk to military and civilian communities downwind of the terminal. Stockpiled military munitions in nearby areas to the spill site could threaten a wider area, expanding the evacuation effort.

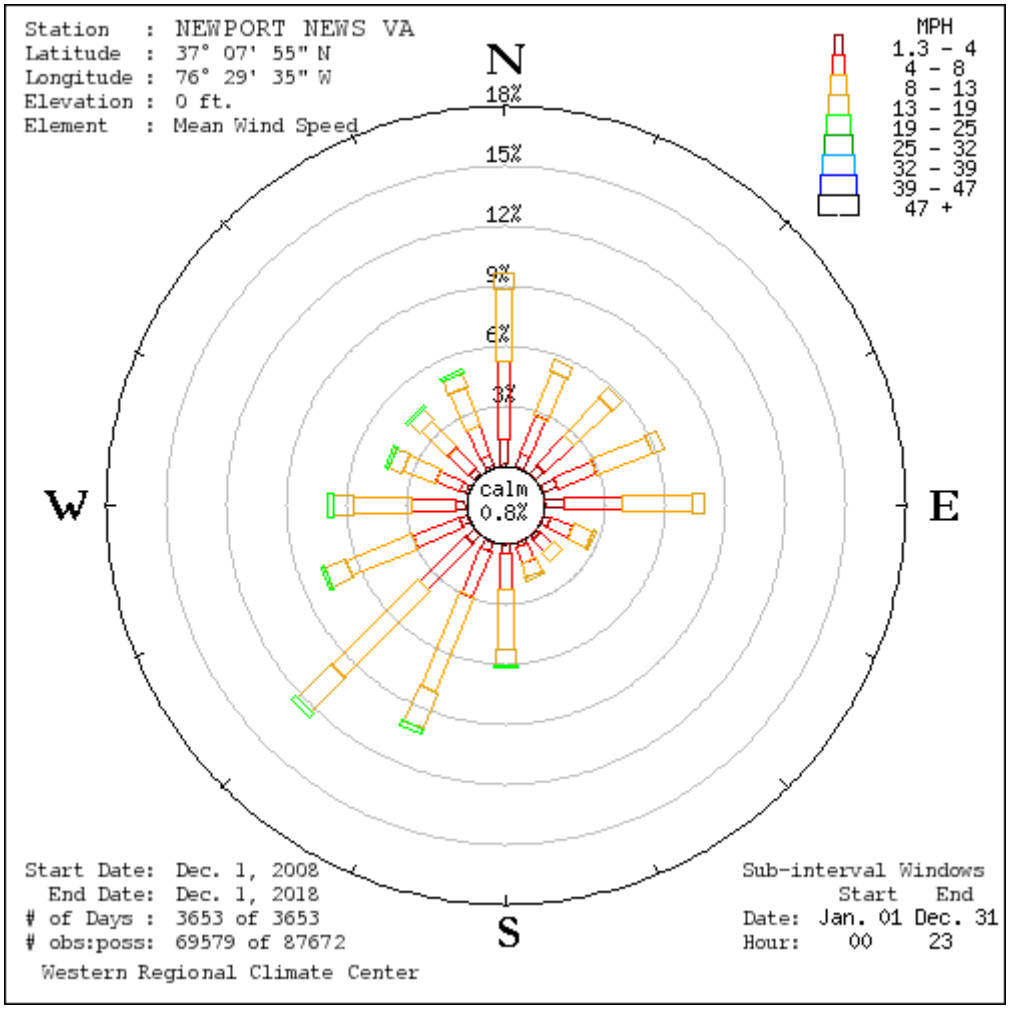
The fuel storage and transfer facilities at JBLE-Eustis do not have breathing apparatus for system operators to use in emergencies involving large spills and heavy vapors. Inhaled vapor can cause severe lung irritation with coughing and gagging, and can lead to chemical pneumonia and death. Jet A, gasoline, and diesel fuel can be toxic to the human body, whether by skin contact or by ingestion.[65] Evacuation from the area is the recommended safety strategy to avoid personnel from being overcome by vapors or seriously injured by exposure to toxic levels of liquid fuel. Facility personnel are trained to safely operate the transfer systems and to take initial safety actions to stop and isolate a spill. They are not trained or expected to be directly involved in large spill containment and recovery operations. Recovery of large amounts of spilled fuel is primarily the responsibility of the OSRO.

Prevailing Wind Directions and Speed[66]

The prevailing wind direction at JBLE-Eustis is from the southwest averaging 8 to 13 miles per hour. A wind rose map is provided as **Figure A3-3**.

[63] 40 CFR Part 112 Appendix F 1.3.5
[64] 40 CFR Part 112 Appendix F 1.3.5.1
[65] 40 CFR Part 112 Appendix F 1.3.5.1
[66] 40 CFR Part 112 Appendix F 1.3.5.1

Figure A3-3. Wind Rose Map for Newport News, VA



Water Currents, Tides, and Wave Conditions[67]

The James River in the vicinity of JBLE-Eustis is a tidal river with a normal tidal fluctuation of 2 to 3 feet. A navigational chart of the James River is included in **Annex 1 (Attachment 1B)**. The full legend for all navigational chart symbols can be found here:

https://nauticalcharts.noaa.gov/publications/us-chart-1.html.

Flood stages established by the National Oceanic and Atmospheric Administration (NOAA) for the James River are shown in the Table below.

[67] 40 CFR Part 112 Appendix F 1.3.5

Table A3-2. James River Flood Stages

Flood Category	Station		Description of Potential Effects
	Sewell's Point & Fort Monroe (ft)	Jamestown/ Scotland Ferry (ft)	
Major Flood Stage	6.5	5	Severe flooding will cause extensive inundation and flooding of numerous roads and buildings resulting in a significant threat to property and life. Water will be 2 to 3 feet or more above ground level in some areas. Severe flooding will extend inland from the waterfront and shoreline flooding homes, businesses and isolating some neighborhoods. Numerous roads will be impassable under several feet of water and cars submerged. Some areas will need to be evacuated.
Moderate Flood Stage	5.5	4.5	Widespread flooding of vulnerable areas will result in an elevated threat of property damage to homes and businesses near the waterfront and shoreline. Water will be 1 to 2 feet above ground level in some areas resulting in a sufficient depth to close numerous roads and threaten homes and businesses. Flooding will extend inland from the waterfront along tidal rivers and bays resulting in some road closures and flooding of vehicles
Flood Stage	4.5	4	Shallow flooding is expected in the most vulnerable locations near the waterfront and shoreline resulting in a low threat of property damage. Expect up to one foot of water above ground level in low lying, vulnerable areas. Some roads and low lying property including parking lots, parks and lawns near the waterfront will experience shallow flooding.
Action Stage	4	3.5	<No description>
Low Stage	-1	-1	<No description>

Evacuation Routes and Sites[68]

This Plan establishes pre-designated routes for JBLE-Eustis that can be used to evacuate the facility should it become necessary (refer to **Figures A3-4, A3-5, and A3-6**). Because there are multiple fuel storage facilities at the installation, a different route is recommended for each location during an evacuation. The Military Police will to assist in the evacuation of threatened areas and will direct traffic to specific safe evacuation routes and regrouping areas.

Evacuation routes are as follows:

- Third Port – Personnel will exit the Third Port facilities by following Kerr Road to Lee Blvd. to Washington Blvd. to either of the designated Evacuation Regrouping Areas.
- Old Felker Army Airfield Fuel Terminal – Personnel will exit via Mulberry Island Road to Taylor Avenue to Washington Blvd. or Harrison Road to access the designated Evacuation Regrouping Areas.

[68] 40 CFR Part 112 Appendix F 1.3.5

- New Felker Army Airfield Fuel Terminal – Personnel will exit via Condon Road to Mulberry Island Road to Taylor Avenue to Washington Blvd. or Harrison Road to access the designated Evacuation Regrouping Areas.
- TVRP – Personnel will exit via Washington Blvd. and turn north to the designated Evacuation Regrouping Areas or turn south to Madison Ave. to Lee Blvd. to the designated Regrouping Areas.

Injured personnel will be triaged by JBLE-Eustis FES and if need be will be transported via ambulance to **Bon Secours Mary Immaculate Hospital**, 2 Bernardine Drive, Newport News, Virginia 23602 via I-64 East or Warwick Blvd East.[69]

[69] 40 CFR Part 112 Appendix F 1.3.5

Figure A3-4. JBLE-Eustis Primary Evacuation Route

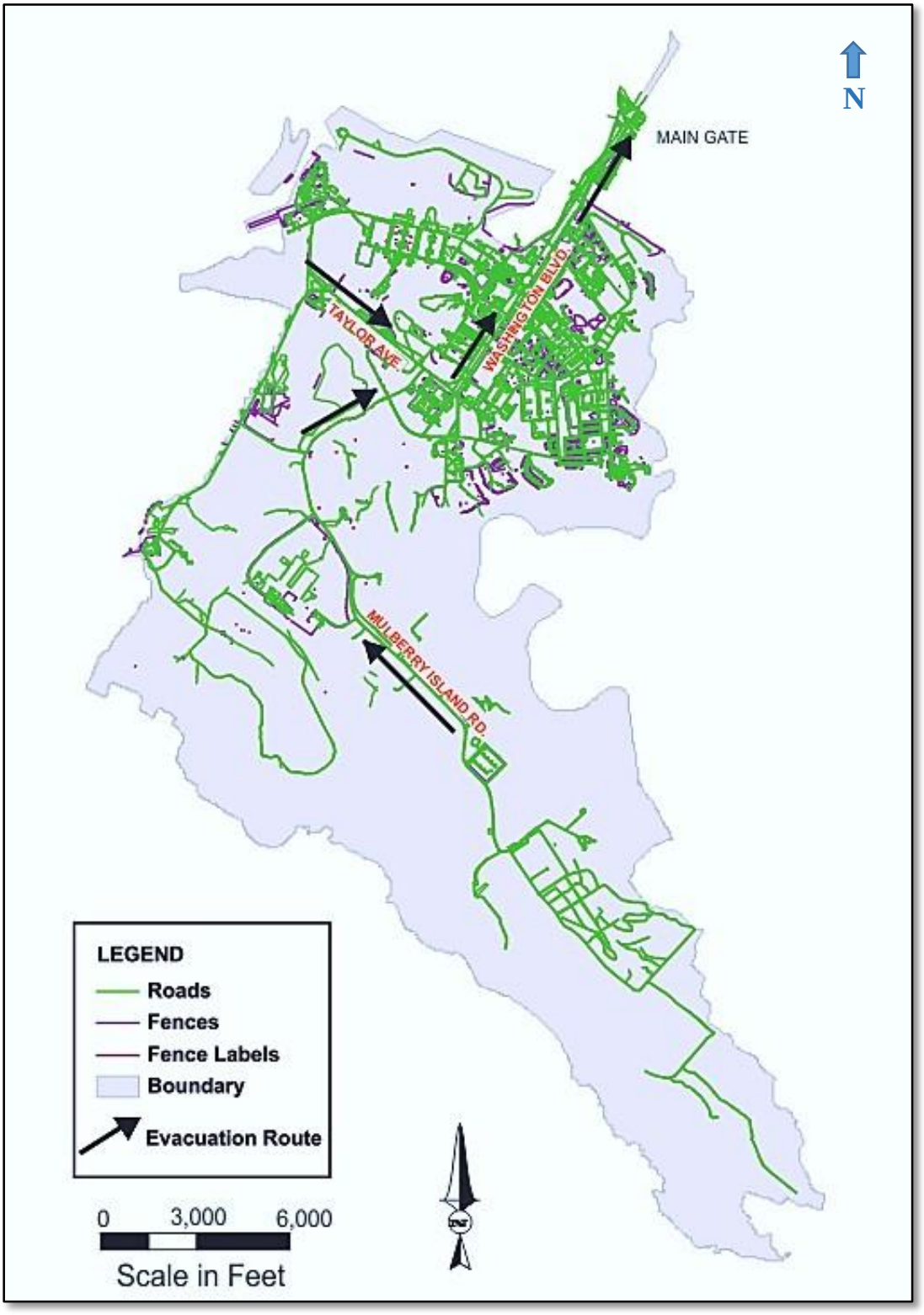


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Figure A3-5. JBLE-Eustis Contonement Area Evacuation and Arrival Routes

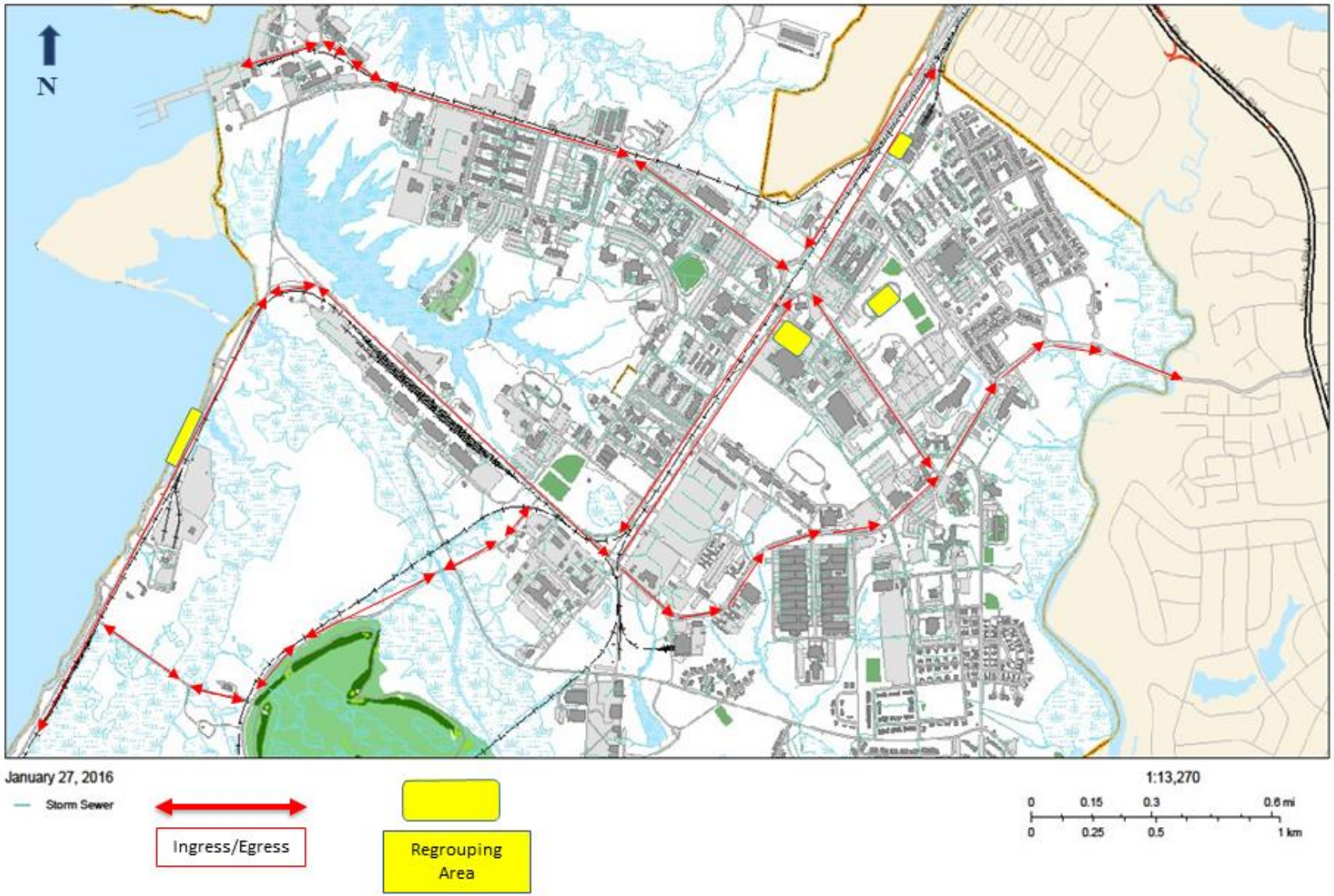
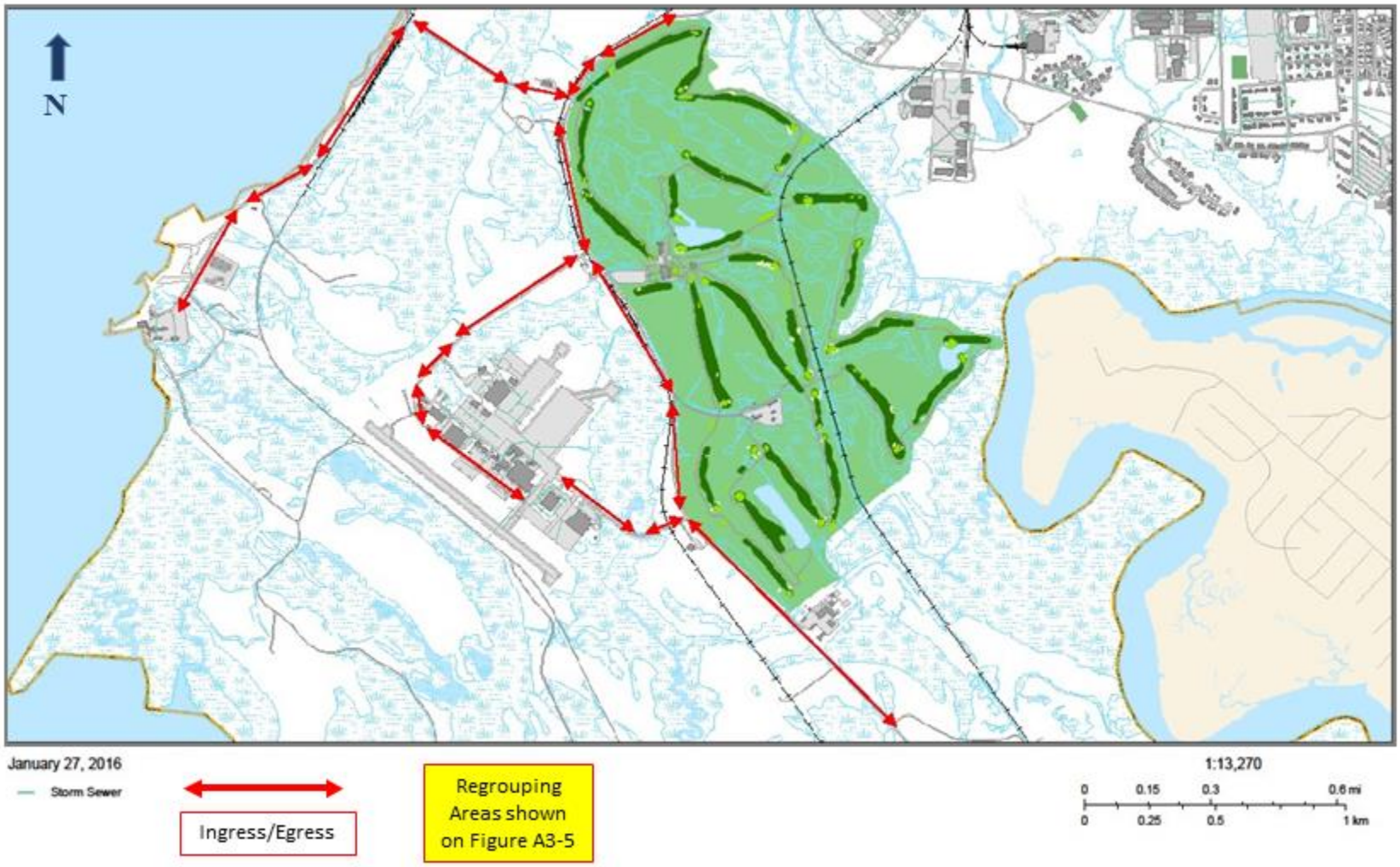


Figure A3-6. JBLE-Eustis Felker Field Evacuation and Arrival Routes



Evacuation Regrouping Areas[70]

The locations of the evacuation regrouping areas are:

- The athletic fields,
- The Post Exchange parking lot,
- The picnic area along Harrison Road (adjacent to James River), or
- JBLE-Eustis Museum parking lot.

Personnel accountability checks will be performed by supervisors at the designated evacuation regrouping areas.

Mitigation Command Center Location[71]

FES Base Station, Building 648, will serve as the fixed Command Post (EOC) for all emergency operations.

Shelters[72]

Facilities on the installation with sufficient space to provide temporary shelter or housing are available, if needed. The main gymnasium (Anderson Field House), the Reserve Center, Child Development Center, and/or barracks could serve as temporary shelters.

Actions by Fuel System Operators

During the evacuation, fuel operations personnel will shut off the master power switch for the fuel facility and coordinate with FES before departure. It is likely that a designated fuel operations individual would remain on site with FES and their emergency vehicles to ensure that information on the fuel facility status is readily available and that the type of emergency and risks involved are understood by the responding units. In evacuation efforts, the fuel facility main gate will be left open for access by supplementary firefighting and emergency support units. The Military Police will remain nearby to control access to the vacated facility.

Individual Evacuation

Installation personnel have been given supervisory authority to evacuate an area when in the personnel's judgment, a dangerous situation has developed at their facility. They will make reasonable efforts to communicate the danger to other personnel by whatever means are available and then depart the area immediately to a nearby safe area.

Community Evacuation Plans[73]

Evacuation of the local community would be conducted by the Newport News Division of Emergency Management. Some assistance from JBLE-Eustis Military Police and FES personnel would likely be provided for evacuation of communities closest to the installation or in most immediate danger. The Newport New Emergency Operations Plan is available at: https://www.nnva.gov/633/Emergency-Plans.

[70] 40 CFR Part 112 Appendix F 1.3.5.1
[71] 40 CFR Part 112 Appendix F 1.3.5.1
[72] 40 CFR Part 112 Appendix F 1.3.5.1
[73] 40 CFR Part 112 Appendix F 1.3.5.3

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ATTACHMENT 3C
SPILL RESPONSE EQUIPMENT

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SPILL RESPONSE EQUIPMENT AVAILABLE AT JBLE-EUSTIS[74]

Equipment/Material	Quantity Available	Storage Location
Trailer w/tie for Carolina Skiff boat	1	CES/CEIE
Carolina Skiff (19 ft) boat	1	CES/CEIE
Yamaha 90 HP Motor and trolling motor	1	CES/CEIE
Fire Department Brush Truck	1	FES
Fire Department Rescue Vehicle inventory	1	FES
Boat, Boston Whaler, 18 ft	1	CES Storage Yard
Truck Forklift, 4,000 lb	1	CES Storage Yard
Truck Forklift, 6000 lb	1	CES Storage Yard
Crane Truck 25 T	1	CES Storage Yard
Crane	1	CES Storage Yard
Snow Plow	4	CES Storage Yard
Scoop Loader	3	CES Storage Yard
Containment boom (old)(on Z trailer)	2,000 ft.	Third Port
Containment boom serviceable from 680th	1,700 ft.	FES
Skim-Pak skimmer	2	Third Port
Float-Pump	2	Third Port
Oil absorbent socks	Up to 10	Third Port/Spill Trailer
Oil absorbent pads (200 pads/bale)	Up to 20 bales	Third Port/Spill Trailer
Universal absorbent pads	Up to 20 bales	Third Port/Spill Trailer
Absorbent oil auto dry	varies	CES Supply
Oil absorbent socks and other materials	varies	Third Port/Spill Trailer
Drum cart	2	FES
Waste disposal 55-gallon drums	Approx. 10	Bldg. 1637 or HWAF
Hand Tools (non-sparking shovels, squeegees, rakes, etc.)	Assorted	FES

Note: The following are potentially available to be used to store recovered material: [75]

- Approximately 27 used oil tanks are located throughout the installation for a total capacity of approximately 12,000 gallons.
- The two 30,000-gallon tanks at the Third Port may receive oily water.
- Typically 10 55-gallon drums are available at the HWAF.

[74] 40 CFR Part 112 Appendix F 1.5.1.1; 33 CFR §154.1035(e)(3)(iii)
[75] 40 CFR Part 112 Appendix F 1.5.1.1

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ATTACHMENT 3D
SYSTEM SCHEMATICS[76]

- Schematic 1. Third Port Area Pier System
- Schematic 2A. Felker AAF Fuel System Schematic (Existing)*
- Schematic 2B. Felker AAF Fuel System Schematic (Under Construction)*
- Schematic 3. Tactical Vehicle Refueling Point (TVRP)
- Schematic 4. Typical Piping Arrangements for Tanks with Fuel Dispensers
- Schematic 5. Typical Piping Arrangements for Emergency Generator Tanks, Fuel Oil Tanks, and Fire Suppression System Tanks

*As of 1 June 2021, the old Felker Army Airfield Fuel Terminal is expected to be decommissioned after the new Fuel Terminal is constructed and turned over to the Government. Schematics for the new Fuel Terminal are based on construction drawings and should be field-verified and modified upon Government acceptance of the infrastructure.

[76] 40 CFR Part 112 Appendix F 1.4.1; 33 CFR §154.1035

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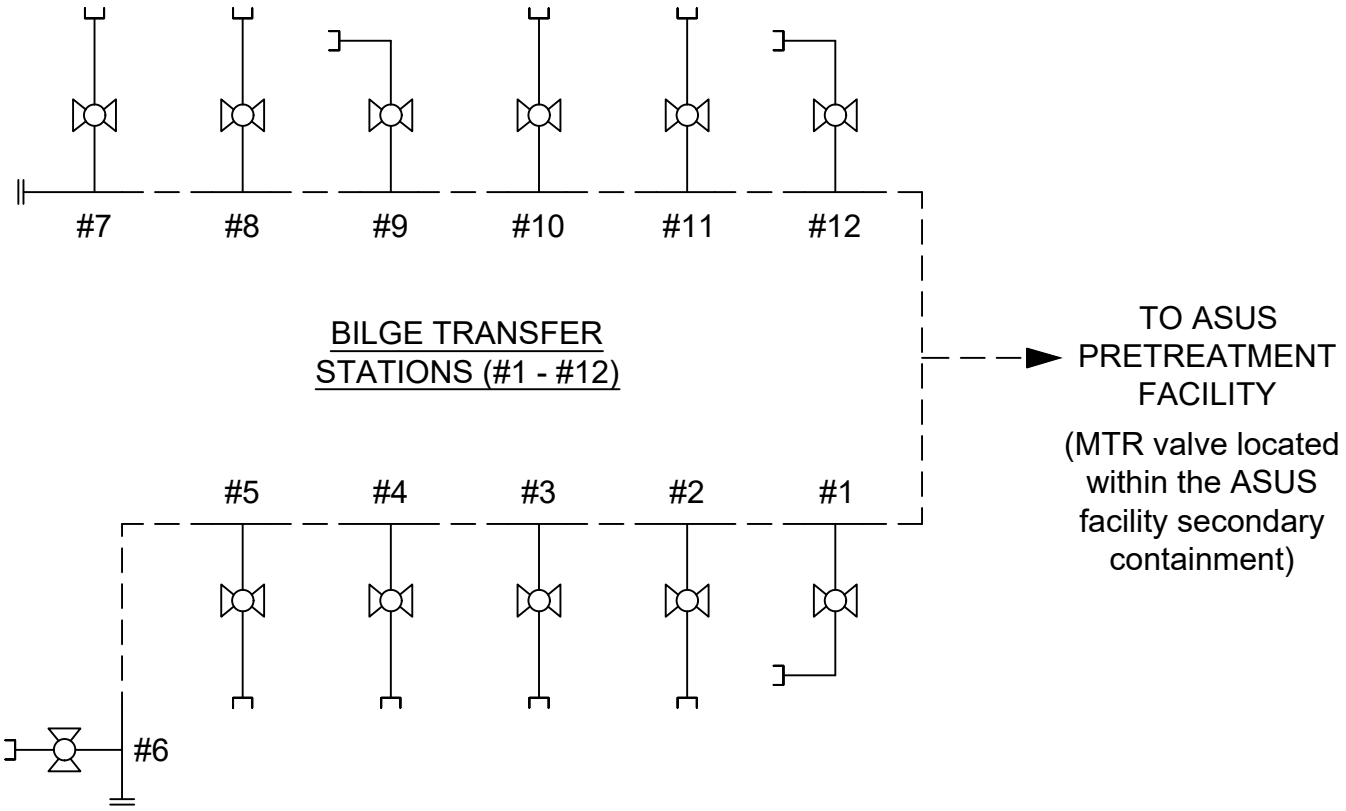

LEGEND

- BALL VALVE
- CAM LOCK COVER
- BLIND FLANGE
- ABOVE GROUND PIPING
- BELOW GROUND PIPING

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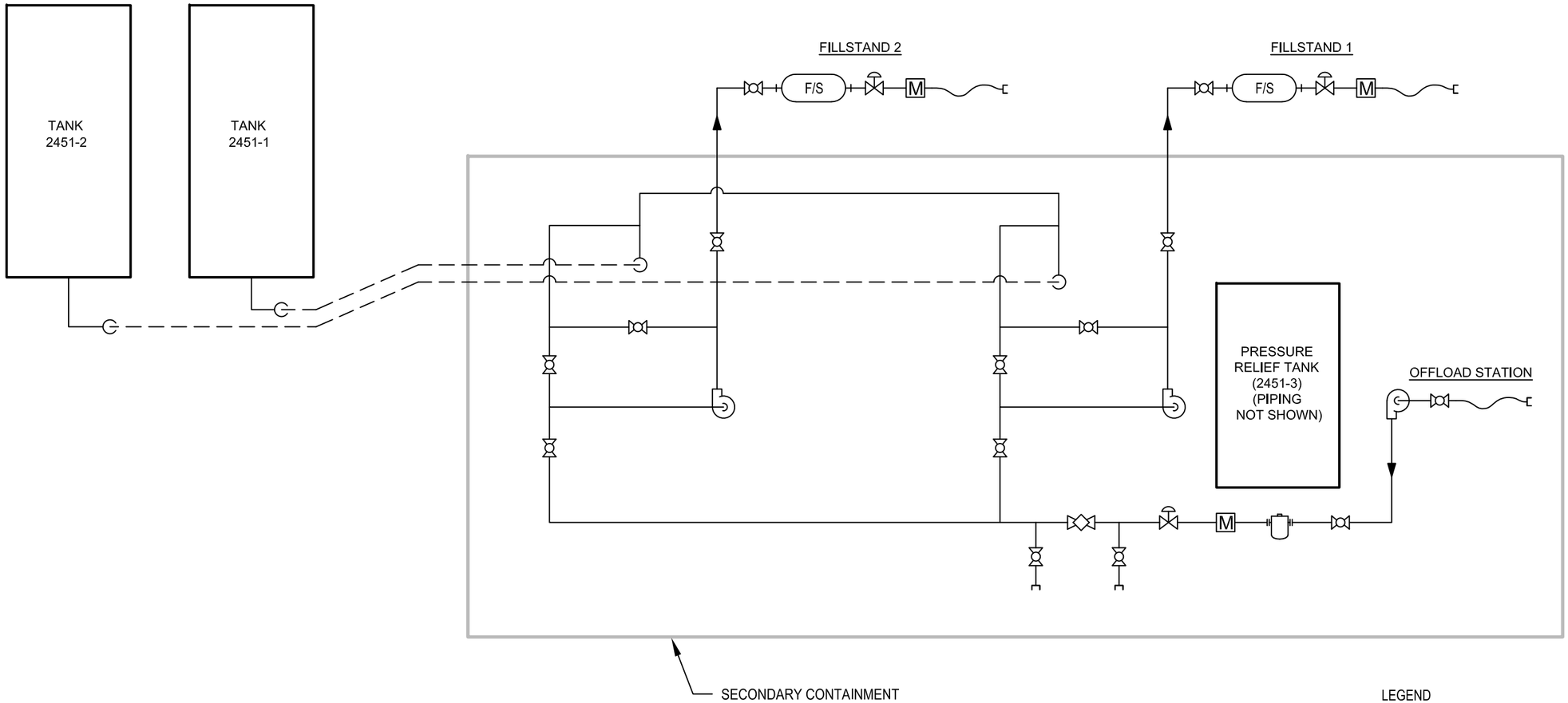
INTEGRATED CONTINGENCY PLAN (ICP)
JBLE-EUSTIS, VIRGINIA

PROJECT NO:	SCALE:	DATE:	DRAWN BY:
AFCBPA2.0002. 1002.0201	As Shown	6/11/2021	MRM

THIRD PORT PIER SYSTEM SCHEMATIC

SCHEMATIC 1



LEGEND

- BALL VALVE
- CONTROL VALVE
- DOUBLE BLOCK & BLEED VALVE
- F/S — FILTER / SEPARATOR
- BASKET STRAINER
- CAM LOCK
- M — METER
- PUMP
- ABOVE GROUND PIPING
- BELOW GROUND PIPING
- FLOW ARROW
- GROUND PENETRATION

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FELKER ARMY AIRFIELD FUEL TERMINAL (EXISTING, EXPECTED TO BE DEMOLISHED IN 2021/2022)

SCHEMATIC 2A

INTEGRATED CONTINGENCY PLAN (ICP)
JBLE-EUSTIS, VIRGINIA

DRAWN BY: MRM

DATE: 6/11/2021

SCALE: NOT TO SCALE

PROJECT NO: AFCBPA2.0002.1002.0201

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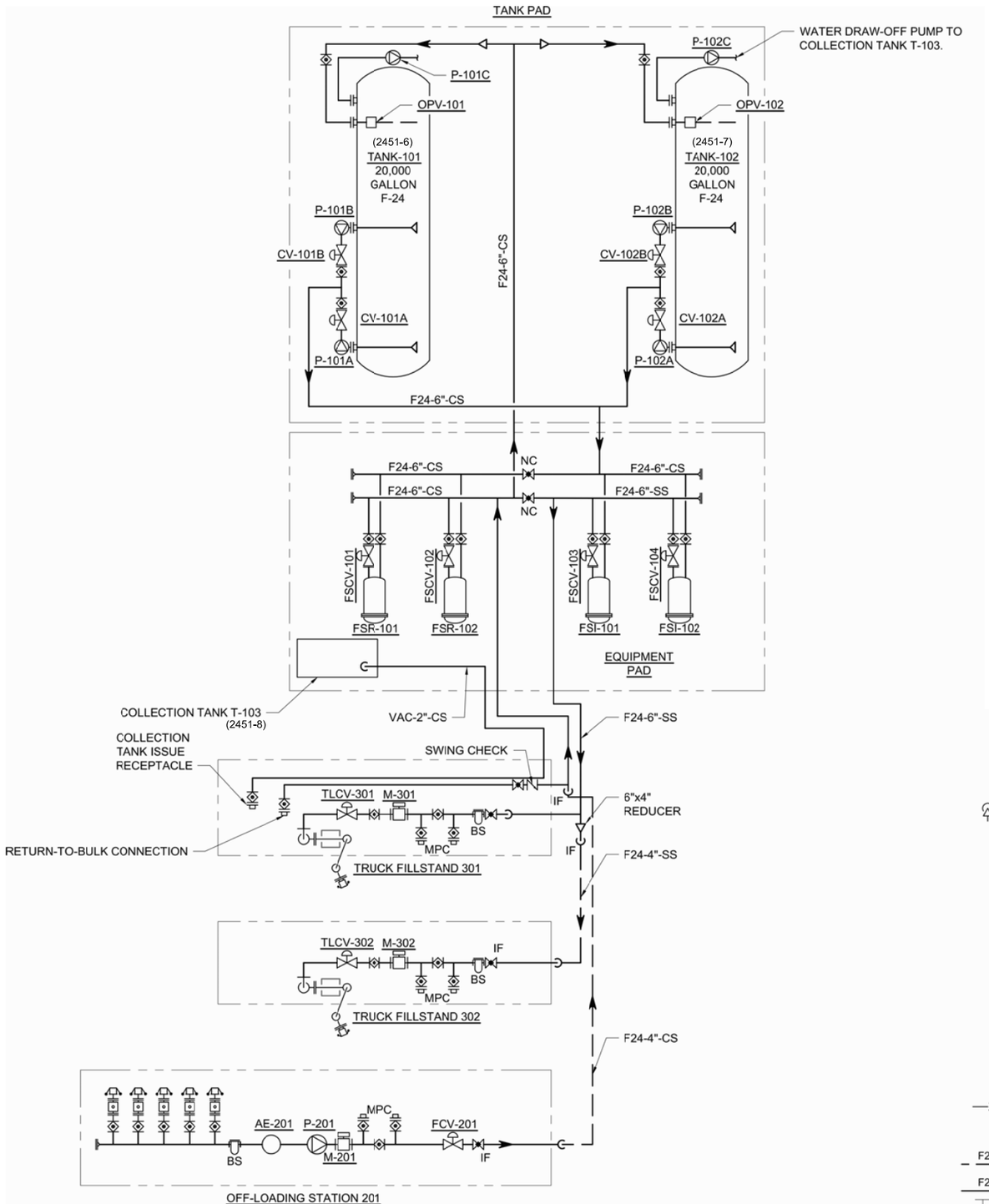

SYSTEM FLOW SCHEMATIC

SCALE: NONE

NEW	DESCRIPTION
	WELD NECK FLANGE
	DOUBLE BLOCK AND BLEED VALVE (ARROW INDICATES INTEGRAL BYPASS RELIEF)
OR	RELIEF VALVE
	PRESSURE INDICATOR
	CONTROL VALVE
	BALL VALVE
	ECCENTRIC REDUCER
	CHECK VALVE
	CONTROL VALVE
	GLOBE VALVE
	BASKET STRAINER
	FLEXIBLE PIPE CONNECTOR
	FLOW QUANTITY INDICATOR
	FLOW QUANTITY INDICATOR
	FLOW ARROW
X—X	FENCE LINE
1	PIPE SUPPORT TYPE (SEE M-502)
F24-10"-CS	UNDERGROUND PIPING
F24-10"-CS	ABOVEGROUND PIPING
	PRODUCT PIPELINE ABBREVIATION
	MATERIAL TYPE
	SIZE
	PUMP

NOTE:
SCHEMATICS ARE DESIGN DRAWINGS FOR FUEL SYSTEM BEING INSTALLED IN 2021.

Source: Austin Brockenbrough, March 2019. Replace Fuel Facilities Joint Base Langley-Eustis, M-001 (100% Design) and G-009 (100% Design). Contract No. W9128F-12-D-0006.

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FELKER ARMY AIRFIELD
FUEL SYSTEM SCHEMATIC
(SYSTEM UNDER CONSTRUCTION IN 2021)

SCHEMATIC 2B

INTEGRATED CONTINGENCY PLAN (ICP)
JBLE-EUSTIS, VIRGINIA

DRAWN BY: MRM
DATE: 6/11/2021
SCALE: NOT TO SCALE
PROJECT NO: AFCBPA2.0002.1002.0201

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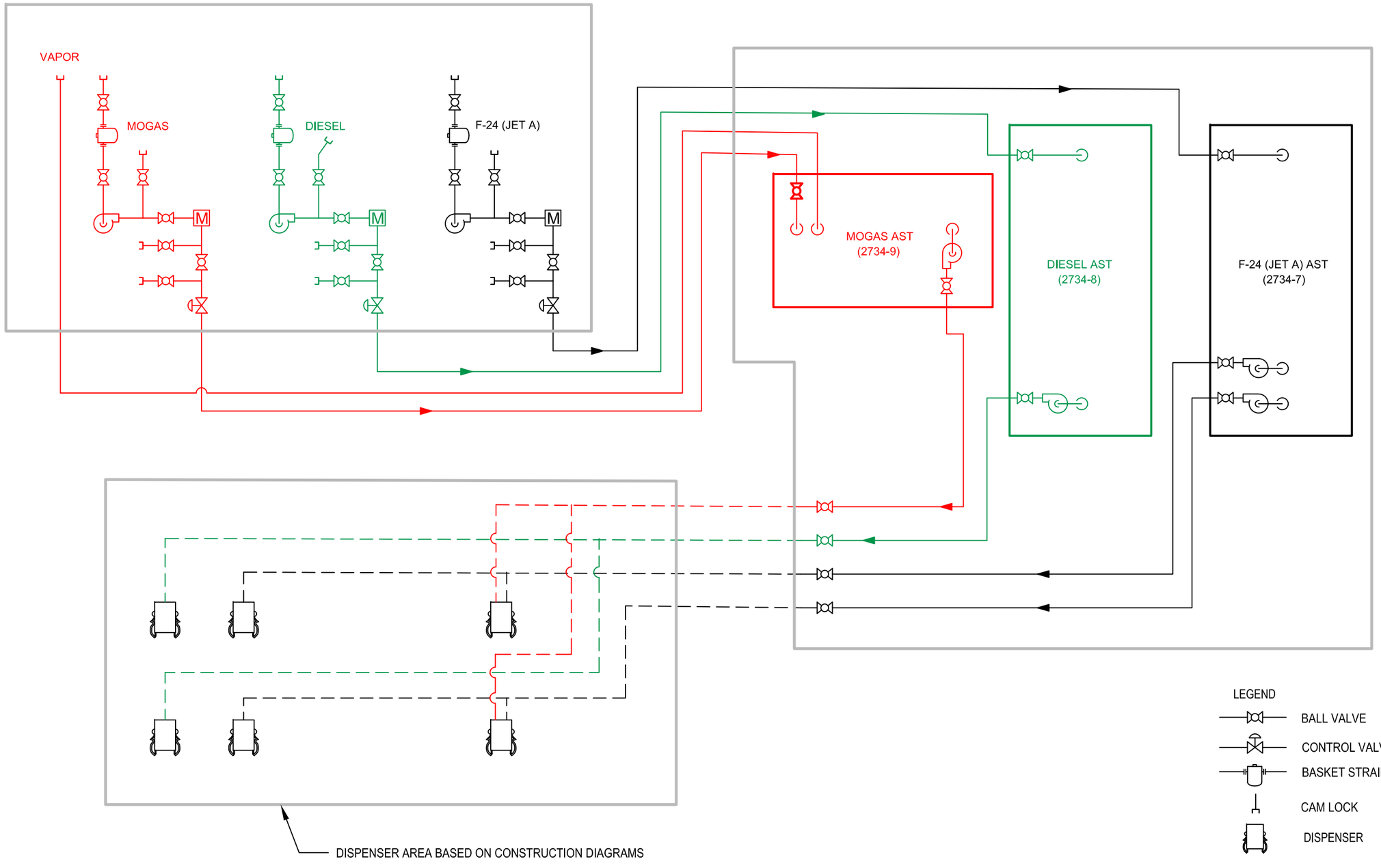

LEGEND

- BALL VALVE
- CONTROL VALVE
- BASKET STRAINER
- CAM LOCK
- DISPENSER
- METER
- PUMP
- ABOVE GROUND PIPING
- BELOW GROUND PIPING
- FLOW ARROW
- TANK PENETRATION

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TACTICAL VEHICLE REFUELING FACILITY

SCHEMATIC 3

INTEGRATED CONTINGENCY PLAN (ICP)
JBLE-EUSTIS, VIRGINIA

DRAWN BY: MRM

DATE: 6/11/2021

SCALE: NOT TO SCALE

PROJECT NO: AFCBPA2.0002.1002.0201

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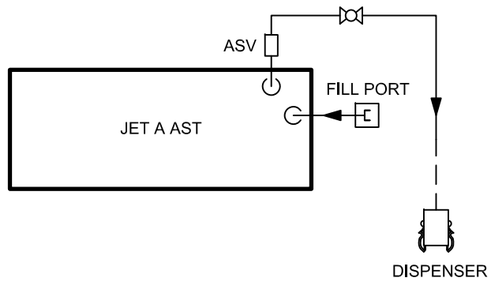
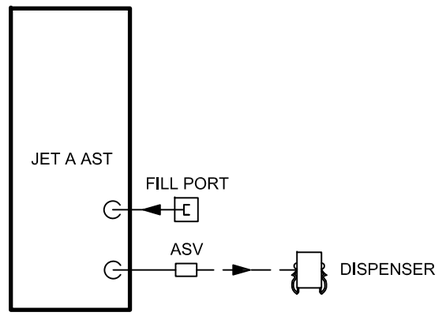
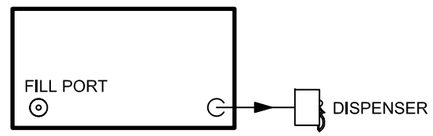
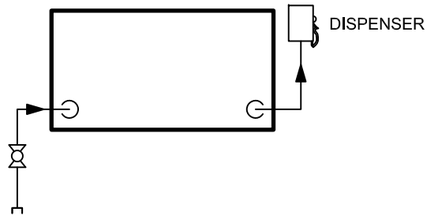




TANK WITH FILL PORT ON TANK

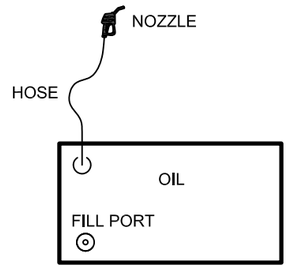


TANK WITH REMOTE FILL PORT



Tanks with mounted dispensers
843-2
866-2
1209-1
1423-2
1428-1
2606-2
3302-1
3302-2
3506-1
3517-1
3520-1
3520-1
3941-2
3941-3

OIL TANKS WITH DISPENSERS



Oil Tanks with dispensers
1383-2
1383-3

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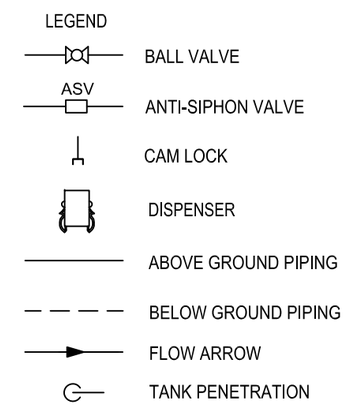
LEGEND



TYPICAL PIPING ARRANGEMENTS FOR TANKS WITH FUEL DISPENSERS

SCHEMATIC 4

INTEGRATED CONTINGENCY PLAN (ICP)
JBLE-EUSTIS, VIRGINIA

DRAWN BY: MRM

DATE: 6/11/2021

SCALE: NOT TO SCALE

PROJECT NO: AFCBPA2.0002. 1002.0201

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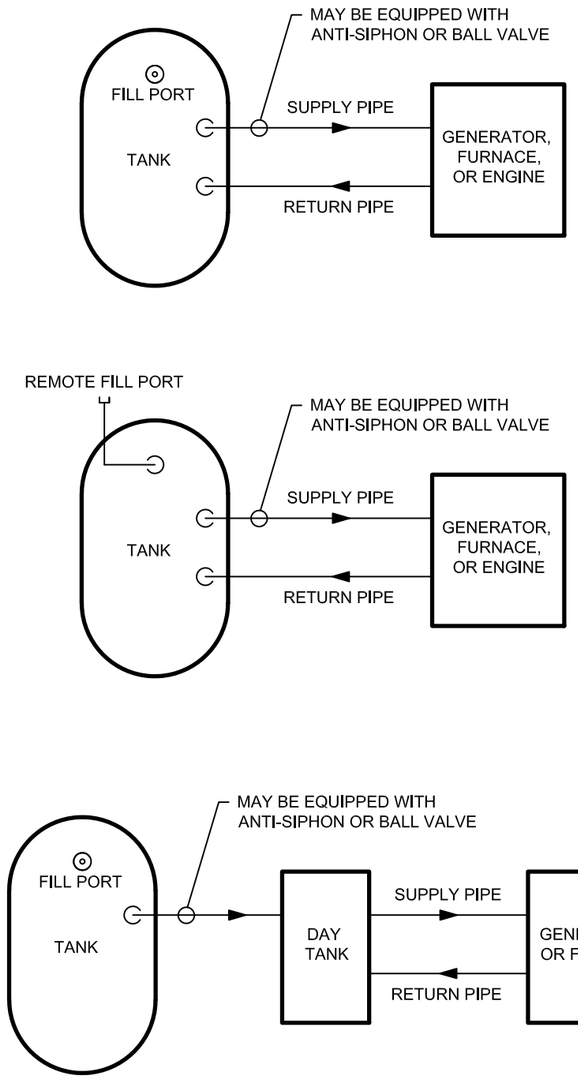
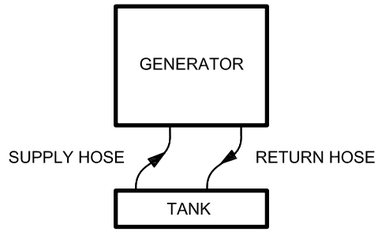
Side-by-Side Arrangement Tanks
Generators
210-1
1754-1
1754-1
Heating Oil Tanks
843-1
1405-1
1423-1
3507-2
3509-2
3523-1
3905-1
3910-1
3911-1
Fire Suppression System Tanks
589-1
703-1
1416-1
2404-1



SIDE-BY-SIDE ARRANGEMENTS



SUB-BASE ARRANGEMENT

Sub-Base Arrangement Tanks
002-1
006-1
009-1
121-1 LS
401-1
451-4
460-5
460-6
515-2
601-2
648-2
661-1
661-2
662-1
667-1
691-1
692-2
705-1
705-2
825-1
839-1
890-1 AWS
900-1
1013-1
1013-2
1028-1
1034-1
1382-1
1387-1
1406-1
1406-3
1406-4
1407-1
1408-1
1410-2
1413-1
1503-1
1504-1
1605-1
1618-1 WT
1700-1
2023-1
2300-1
2401-1
2417-1
2517-1
2717-1
2734-1
23rd/Bldg 100

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TYPICAL PIPING ARRANGEMENTS FOR EMERGENCY GENERATOR TANKS, FUEL OIL TANKS, AND FIRE SUPPRESSION SYSTEM TANKS

SCHEMATIC 5

INTEGRATED CONTINGENCY PLAN (ICP)
JBLE-EUSTIS, VIRGINIA

DRAWN BY: MRM
DATE: 6/11/2021
SCALE: NOT TO SCALE
PROJECT NO: AFCBPA2.0002. 1002.0201

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ATTACHMENT 3E
CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

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Certification of the Applicability of the Substantial Harm Criteria

Joint Base Langley Eustis - Eustis (JBLE-Eustis)
Civil Engineer Squadron – 733rd Mission Support Group Environmental Element
Ft. Eustis, Virginia 23604

In accordance with 40 CFR Part 112, Appendix C, Attachment C-II, the following identifies whether a facility "*could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters of adjoining shorelines.*"

If there is a "yes" answer to one or more of the following five questions, then a USEPA Facility Response Plan is required to be prepared.

1. Does the facility transfer oil over water to or from vessels **and** does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   Yes X No __

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons **and** does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

   Yes___ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons **and** is the facility located at a distance (as calculated using the appropriate formula in 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's *"Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments"* and the applicable Area Contingency Plan.

   Yes___ No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons **and** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III or comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

   1) If a comparable formula is used documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.
   2) For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

   Yes___ No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons **and** has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

   Yes___ No X

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature	Title
Name *(please type or print)*	Date

ATTACHMENT 3F
CALCULATION OF PLANNING DISTANCE AND WORST CASE DISCHARGE SCENARIO

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CALCULATION OF THE PLANNING DISTANCE[77]

40 CFR 112 Appendix C, Attachment C-III-Calculation of the Planning Distance

4.1 The planning distance method for tidal influence navigable water is based on worst case discharges of persistent and non-persistent oils. Persistent oils are of primary concern because they can potentially cause harm over a greater distance. For persistent oils discharged into tidal waters, the planning distance is 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide.

The worst case spill is based on a spill of oily bilge water (Group 3 oil). Group 3 oil is a petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. Group 3 oils have a specific gravity equal to or greater than 0.85 and less than 0.95. Based on 40 CFR 112 Appendix C, Attachment C-III-Calculation of the Planning Distance, "for persistent oils discharged into tidal waters, the planning distance is 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide."[78]

4.2 For non-persistent oils discharged into tidal waters, the planning distance is 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.

The Worst Case Scenario is based on oily bilge water, a Group 3 persistent oil. Therefore, this distance was not used for the planning distance.

4.3 Example of Determining the Planning Distance for Two Types of Navigable Water Conditions. Below is an example of how to determine the proper planning distance when a facility could impact two types of navigable water conditions: moving water and tidal water.

(1) Facility X stores persistent oil and is located downstream from locks along a slow moving river which is affected by tides. The river velocity, v, is determined to be 0.5 feet/second from the Chezy-Manning equation used to calculate oil transport on moving navigable waters. The specified time interval, t, obtained from Table 3 of this attachment for river areas is 27 hours. Therefore, solving for the planning distance, d:

$d = v \times t \times c$

$d = (0.5 \text{ ft/sec}) \times (27 \text{ hours}) \times (0.68 \text{ secmile/hrft})$

$d = 9.18 \text{ miles.}$

(2) However, the planning distance for maximum tidal influence down current during ebb tide is 15 miles, which is greater than the calculated 9.18 miles. Therefore, 15 miles downstream is the appropriate planning distance for this facility.

The worst case discharge is of a persistent oil (oily bilge water) to a tidal water (James River) with a planning distance of 15 miles. All streams and tributaries, whether they be tidal or moving (non-tidal), at JBLE-Eustis discharge to the James River (tidal). Therefore, the planning distance of 15 miles is used.

[77] 40 CFR Part 112 Appendix F 1.5.1.1, 1.5.2
[78] 33 CFR §154.1045

WORST CASE DISCHARGE SCENARIO

Determination of a Worst Case Discharge Planning Volume

A worst case discharge for JBLE-Eustis is calculated using the appropriate worksheet found in 40 CFR Part 112, Appendix D - Determination of a Worst Case Discharge Planning Volume. An owner or operator is required to complete this worksheet if the facility meets the criteria, as presented in appendix C to this part, or it is determined by the Regional Administrator that the facility could cause substantial harm to the environment. The calculation of a worst case discharge planning volume is used for emergency planning purposes, and is required in 40 CFR §112.20 for facility owners or operators who must prepare a response plan. When planning for the amount of resources and equipment necessary to respond to the worst case discharge planning volume, adverse weather conditions must be taken into consideration. An owner or operator is required to determine the facility's worst case discharge planning volume from either part A of this appendix for an onshore storage facility, or part B of this appendix for an onshore production facility. The worksheet considers the provision of adequate secondary containment at a facility.

In cases where the Regional Administrator determines that the worst case discharge volume calculated by the facility is not appropriate, the Regional Administrator may specify the worst case discharge amount to be used for response planning at the facility. For complex facilities (i.e., facilities regulated by two or more federal agencies), the worst case planning quantity shall be the larger of the amounts calculated for each component of the facility.

Transfers to Third Port Facility

The Third Port facility at JBLE-Eustis is located along Skiffes Creek, near the confluence with the James River. A long mooring dock allows Army landing craft, tug boats, and landing ships to secure themselves when not underway. These ships occasionally pump their oily bilge water through one of seven sludge discharge stations to a single 30,000-gallon AST erected within secondary containment. There are no inline breakout tanks between the discharge stations and the first valve is within the secondary containment. The piping leads from this valve into the 30,000-gallon AST. JBLE-Eustis follows the instructions provided in Appendix D to 40 CFR Part 112 to calculate the worst case discharge planning volume for the installation.

USEPA Small, Medium and Worst Case Determination[79]

1. The calculation of a worst case discharge at JBLE-Eustis is handled under 40 CFR 112, Appendix D, Part A.2, Worst Case Discharge Planning Volume Calculation for On-Shore Storage Facilities, Multiple-Tank Facilities. At JBLE-Eustis the largest single AST within an adequate secondary containment area is 30,000 gallons. This tank is located at the old Felker Army Airfield Jet A terminal. Most ASTs at JBLE-Eustis are provided with secondary containment. The final worst case volume is 30,000 gallons.
2. The USEPA defines a medium discharge as the lesser of 36,000 gallons or 10 percent of the worst case discharge. Therefore, a medium discharge at JBLE-Eustis is defined as 3,000 gallons.
3. The USEPA defines a small discharge as less than or equal to 2,100 gallons but not to exceed the calculated worst case discharge. Therefore, a small discharge at JBLE-Eustis is defined as 2,100 gallons.

[79] 40 CFR Part 112 Appendix F 1.5.1, 1.5.2

Secondary containment - multiple-tank facilities

Are all oil ASTs or groups of oil ASTs at the facility without adequate secondary containment?

Note: Secondary containment is described in 40 CFR part 112, Subparts A through C. Acceptable methods and structures for containment are also given in 40 CFR 112.7(c)(1).

No (Y/N)

If the answer is no, calculate the total aboveground oil storage capacity of tanks without adequate secondary containment. If all oil ASTs or groups of oil ASTs at the facility have adequate secondary containment, ENTER "0" (zero).

1,170 GAL

Calculate the capacity of the largest single oil AST within an adequate secondary containment area or the combined capacity of a group of oil ASTs permanently manifolded together, whichever is greater, PLUS THE VOLUME FROM the above question.

FINAL WORST CASE VOLUME: 31,170 GAL

Note: All complexes that are jointly regulated by the USEPA and USCG must also calculate the worst case discharge planning volume for the transportation-related portions of the facility and plan for whichever volume is greater.

U.S. Coast Guard Worst Case Discharge Determination[80]

The USCG rules that address requirements for the development of Response Plans are contained in 33 CFR Part 154, Facilities Transferring Oil or Hazardous Materials in Bulk. The portion of JBLE-Eustis where these rules apply is the Third Port Bilge Water Pretreatment Facility because oily bilge water is transferred from vessels to the Pretreatment Facility. A section of this facility can involve the transfer of oil (oily bilge water) from a vessel with a tank capacity of more than 250 barrels (10,500 gallons). The largest tank capacity of the vessels that moor and transfer bilge water is 26,000 gallons.

JBLE-Eustis Third Port facility contains over 1,000 feet of containment boom. FES also stores another 1,000 feet of containment boom that is located in on-site trailers.

JBLE-Eustis has contracted with HEPACO to respond to the maximum probable discharge volume of 26,000 gallons. HEPACO can respond to JBLE-Eustis within 2 hours (during normal business hours).[81] HEPACO's travel time to JBLE-Eustis is approximately 1 hour during light traffic periods.

JBLE-Eustis would utilize the capacity of the 30,000-gallon wastewater equalization AST to satisfy temporary storage capacity required in Appendix E of Section 4.5 of 33 CFR Part 154. This AST is equipped with a concrete secondary containment.

1. In determining the worst case calculation at the Third Port, JLBE-Eustis must consider the loss of the entire capacity of all in-line and breakout tanks needed for the continuous operation of the pipeline to deliver oily bilge water to the 30,000-gallon AST. The discharge of all piping carrying oil between the marine transfer manifold, the dock, and the non-transportation-related portion of the facility, the holding tank, is also considered in making the determination. The worst case spill is based on a spill of oily bilge water (Group 3 oil).

[80] 33 CFR §154.1045
[81] 40 CFR Part 112 Appendix F 1.3.4

Group 3 oil is a petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. Group 3 oils have a specific gravity equal to or greater than 0.85 and less than 0.95.

2. The worst case scenario is a rupture in the underground piping between the dock and the holding tank while the largest vessel is pumping oily bilge water and discharging at the rate of 35.7 barrels per hour through ship sludge discharge station #1.
3. The planning volume consists of the maximum amount of oil which could be accidentally discharged between the time the rupture occurs and the operation is shut down, plus the volume of oil in the line to the storage portion of the facility, which would continue to flow by gravity after the shutdown of the pump aboard the vessel. Therefore, the worst case discharge planning volume is calculated:

$$\mathbf{WCD = [(MTR + MTSD) \times MFR] + TLDV}$$

Where:

- WCD = Worst case discharge, in barrels
- MTR = Maximum time to discover the release in hours. This is an estimate of the time the operators would take to discover the rupture and is based on the length of the piping, topography, and other factors that would enable a spill to continue without discovery, even in the presence of qualified operators.
- MTSD = Maximum time to shut down transfer operations after discovery (in hours). This is an estimate of the time the operators would need to confirm the rupture and notify the vessel to terminate the transfer, plus the time needed for the vessel crew to shut down the transfer pumps.
- MFR = Maximum flow rate of the transfer pump in barrels per hour.
- TLDV = Total line discharge volume in barrels. This is the amount of oil that could flow out of the piping by gravity, through the rupture, after shut down of the transfer pump.

For this calculation, TLDV is assumed to be the entire volume of piping from the transfer manifold on the dock to the first valve ashore within the secondary containment at the storage site.

In such a case:

$$\mathbf{Vp = 3.1417 \times R^2 X L}$$

Where:

Vp = Volume of the piping

R = Radius of the pipe

L = Length of the piping

The following parameters are based on the conditions at the Third Port:

R = 2"

L = 1,031.25' or 12,375"

MTR = 0.08 hours (5 minutes)

MTSD = 0.05 hours (3 minutes)

MFR = 35.7 barrels per hour (25 gallons per minute pump rate)

Calculations:

$Vp = 3.1417 \times R^2 \times L$

$= 3.1417 \times 2^2 \times 12{,}375 = 155{,}508.84\ in^3$

$= 155{,}508.84\ in^3 / 231\ in^3$ per gallon = 673.20 gallons

= 673.20 gallons / 42 gallons per barrel = 16.03 barrels

WCD = [(MTR + MTSD) x MFR] + TLDV

= [(0.08 + 0.05) x 35.7) + 16.03 barrels

= 4.641 + 16.03 barrels

= 20.67 barrels = 868.18 gallons.

- The maximum most probable discharge planning volume is 10% of the worst case discharge is 2.07 barrels or 86.8 gallons.
- The average most probable discharge planning volume is 1% of the worst case discharge is 0.21 barrels or 8.7 gallons.

Response Resource Mobilization and Response Times[82]

In each case, the USEPA planning volume is greater than the corresponding USCG planning volume; therefore, the USEPA planning volumes are used.

Response Resources for a Small Discharge. Listed below are the more stringent of the USEPA and USCG requirements for a Small Discharge/Average Most Probable Discharge. The required equipment is present on JBLE-Eustis and is available for deployment in less than 2 hours. A listing of equipment at JBLE-Eustis is available. Calculations for recovery volumes are provided.

- 1,000 feet of containment boom and a means of deploying the boom within 1 hour of the discovery of a spill.
- Oil recovery devices with an effective daily recovery capacity equal to the amount of oil discharged in a small discharge (2,100 gallons) or greater which is available at the facility within 2 hours of the detection of an oil discharge.
- Oil storage capacity for recovered oily material at a rate two times the recovery capacity.

Response Resources for a Medium Discharge. The more stringent of the USEPA and USCG requirements for a Medium Discharge/Maximum Most Probable Discharge are provided below. The required equipment is present on JBLE-Eustis and is available for deployment in less than 6 hours. A listing of equipment at JBLE-Eustis is available. Calculations for recovery volumes are provided.

- Sufficient quantity of containment boom (1,000 feet) available to arrive within the required response times for oil collection and containment, and for the protection of fish and wildlife and sensitive environments.
- Oil recovery devices with an effective daily recovery capacity equal to 50% of the planning volume of oil discharged in a medium discharge (3,000 gallons) or greater which is available at the facility within 6 hours of the detection of an oil discharge.

[82] 40 CFR Part 112 Appendix F 1.5.1; 33 CFR §154.1045

- Oil storage capacity for recovered oily material at a rate two times the recovery capacity.

Response Resources for a Worst Case Discharge. A worst case discharge is considered to be 30,000 gallons at the old Felker Army Airfield Jet A Tank Farm. (The calculated WCD is 31,170 gallons; however, 1,170 gallons of the 31,170-gallon WCD consist of containers that are not equipped with secondary containment and are located at various locations throughout the installation.)

- Tier 1 oil recovery devices are required to be on-scene within 12 hours. Tier 1 assets are available on JBLE-Eustis and are available for deployment within 2 hours.
- Tier 2 contracted and reinforcing assets must be able to arrive on-scene within 36 hours. Tier 2 assets are available from the OSRO within 3 hours of notification.
- Tier 3 assets must be on site within 60 hours. Because the Worst Case Discharge scenario describes a spill of only 31,170 gallons, there is little likelihood of a need for Tier 3 resources.

ATTACHMENT 3G
WORKSHEET TO PLAN VOLUME OF RESPONSE

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WORKSHEET TO PLAN VOLUME OF RESPONSE RESOURCES FOR WORST CASE DISCHARGE[83]

Scenario 1: 26,000 gallons of oily bilge water at the Third Port Area

Part I: Background Information

Step A: Calculate WCD in barrels (40 CFR Part 112, Appendix D)	619 barrels (bbls)
Step B: Determine Oil Group (Table 3 and Section 1.2 of 40 CFR Part 112, Appendix E)	Oil Group 3
Step C: Determine Operating Area (select)	Rivers and Canals
Step D: Determine Percentages of Oil (Table 2 of 40 CFR Part 112, Appendix E)	
D1: Percent Lost to Natural Dissipation	20 %
D2: Percent Recovered Floating Oil	15 %
D3: Percent Oil Onshore	65 %
Step E	
E1: On-Water Oil Recovery = (Step D2 x Step A)/100	93 bbls
E2: Shoreline Recovery = (Step D3 x Step A)/100	402 bbls
Step F: Emulsification Factor (Table 3 of 40 CFR Part 112, Appendix E)	2.0
Step G: On-Water Recovery Resource Mobilization Factor (Table 4 of 40 CFR Part 112, Appendix E)	
G1: Tier 1	0.30
G2: Tier 2	0.40
G3: Tier 3	0.60

Part II: On-Water Oil Recovery Capacity (bbls/day)

Tier 1 (Step E1 x Step F x Step G1)	56 bbls/day
Tier 2 (Step E1 x Step F x Step G2)	74 bbls/day
Tier 3 (Step E1 x Step F x Step G3)	112 bbls/day

Part III: Shoreline Cleanup Volume (bbls)

Shoreline Cleanup Volume (Step E2 x Step F)	804 bbls

[83] 33 CFR §154.1045

Part IV: On-Water Response Capacity by Operating Area

Amount needed to be contracted for in bbls/day (Table 5 of 40 CFR Part 112, Appendix E)

J1: Tier 1	1,500 bbls/day*
J2: Tier 2	3,000 bbls/day*
J3: Tier 3	6,000 bbls/day*
*Based on facility start up date prior to 18 February 1993 and a Rivers and Canals operating area.	

Part V: On-Water Amount Needed to be Identified, but not Contracted for in Advance (bbls/day)

Tier 1 (Part II Tier 1 – Step J1)	0 bbls/day
Tier 2 (Part II Tier 2 – Step J2)	0 bbls/day
Tier 3 (Part II Tier 3 – Step J3)	0 bbls/day
Note: The actual calculated amounts are less than 0.	

ATTACHMENT 3H
PREDICTION OF POTENTIAL SPILL SEVERITY BY TANK AND PRODUCT TYPE

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Attachment 3H[84]

Prediction of Potential Spill Severity by Tank and Product Type

The table below provides a prediction of potential spill severity by tank type/capacity and product. Information presented in the table is coded as follows:

1. **Probability of Occurrence**:
   - High – could occur frequently
   - Medium – Could occur periodically
   - Low – Could occur on less frequent basis
2. **Severity of Release**:
   - High – Major cleanup would be required
   - Medium – Intermediate cleanup would be required
   - Low – Minor clean up would be required

   See the matrix below for potential probability and severity scenarios:

		Severity of Release		
		High	Medium	Low
Probability of Occurrence	High	4	7	9
	Medium	2	6	8
	Low	1	3	5

3. **The total quantity of oil** that could be discharged from the container/equipment is based upon a worst case situation and the time it would take to respond to a spill (*e.g.*, shut off pump, close valve).
4. **The rate of spillage** is highly dependent upon the type of spill. For example, a cracked seam in a tank or fractured joint in a pipeline would result in a slow leak/spill. A ruptured tank or pressurized pipeline or refueling line would result in a much faster and larger spill event. For the purposes of estimating spill rates, the following assumptions have been applied:
   - **Container rupture**: based on a complete and instantaneous container failure and equal to the capacity of the container.
   - **Container leakage**: based on a leak rate that results in the entire capacity being released over 24 hours.

[84] 40 CFR Part 112 Appendix F 1.5.1.2

- **Container overfill**: The rate is based on estimated maximum pumping/transfer/piping delivery rates. For used oil tanks where product is emptied from individual containers by hand (e.g., used oil collection pan).
- **Piping rupture or leakage:** The potential release volumes described in the Table do not take into account the use of any containment or diversionary structures or equipment, in accordance with regulatory requirements.
    - For most fuel tanks, a leak rate is based on a standard 2-inch diameter transfer hose, 30-ft in length during a product transfer for up to 1 minute.
    - For generator supply tanks, a leak rate may be based on a fuel return rate of 5 gallons/minute for 1 hour.
    - The rates assume that the transfer hose is full during the spill and that there is at least one JBLE-Eustis staff member providing oversight of the transfer process. The assumed response rate to terminate the unloading activity.

Rates are shown in gallons per minute (gpm).

5. **Spill prevention measures**:
    1) JBLE-Eustis personnel utilize oil unloading/loading procedures to minimize the potential for spill.
    2) Tank is equipped with an automatic or visual gauge.
    3) JBLE-Eustis personnel conduct monthly inspections to identify potential conditions that may contribute to a leak or spill
    4) Product delivery amounts and tank levels are determined by facility personnel prior to unloading to make sure tank to be filled has available capacity. Delivery amounts are monitored by delivery and facility personnel during off-loading activities (via meter on tank truck or manual stick test).
6. **Spill control measures**:
    1) Container/tank has integral secondary containment (double-walled)
    2) Container/tank fill port has secondary containment
    3) Container/tank has interstitial monitoring capability
    4) Container/tank is located indoors with a concrete floor
    5) Container/tank is located within a constructed berm/metal containment area
7. **Flow direction** is based on existing ground surface topography and physical containment barriers. Should a spill not be contained at the source, it would flow into the facility's storm water catch basins. The discharge from these catch basins would flow either to the on-site creeks and wetlands or ultimately reach the James River. The potential release pathways described do not take into account the use of any containment or diversionary structures or equipment, in accordance with regulatory requirements. Predicted spill flow pathways for each AST and POL drum storage area are described in the SPCC Plan.

Table A3-3. Prediction of Potential Spill Severity by Tank and Product Type

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
30,000-gal AST Product: Jet A Tanks: 2451-1, 2451-2 (Scheduled for removal in 2021/2022)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 4 2) 5 3) 3 4) 3 5) 3	1) 30,000 2) 30,000 3) 25 4) 5 5) 50	1) Instantaneous 2) 20 gpm 3) Instantaneous 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	2, 5	Tank overflow or rupture would flow toward on-site storm drains or to James River. Piping leak would be contained in the containment area and migrate radially on the concrete surface.
20,000-gal AST Product: Jet A Tanks: 2451-6, 2451-7 (Expected to be turned over to Government in 2021)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 1 2) 1 3) 5 4) 5 5) 5	1) 20,000 2) 20,000 3) 25 4) 5 5) 50	1) Instantaneous 2) 20 gpm 3) Instantaneous 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	1, 2, 3, 5	Tank overflow or rupture would flow southwest and southeast to low wet areas and ultimately to James River. Piping leaks and overfills will be contained in the containment area.
30,000-gal AST* Product: Bilge Water Tank ID: 410-1 (ASUS)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 5 2) 5 3) 3 4) 3 5) 3	1) 30,000 2) 720 3) 125 4) 5 5) 50	30,000 gpm (instantaneous) 720 gal per hr 125 gpm 5 gpm 50 gpm	1, 2, 3, 4	3, 5	Tank overflow or rupture would flow toward on-site storm drains or to Skiffes Creek. Piping leak would be contained in the general vicinity and migrate radially on the concrete surface.
12,000-gal AST Product: Diesel Tanks: 950-1, 950-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 7 2) 5 3) 3 4) 3 5) 3	1) 12,000 2) 12,000 3) 25 4) 300 5) 50	1) Instantaneous 2) 8 gpm 3) Instantaneous 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	1, 2, 3	Releases would flow toward on-site storm drains to the Warwick River. Piping leak would be contained in the general vicinity and migrate radially on the concrete surface.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
12,000-gal AST Product: Jet A (F-24), Diesel Tanks: 2734-7, 2734-8 (TVRP) (Expected to be turned over to Government in 2021)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 4 2) 5 3) 3 4) 3 5) 3	1) 12,000 2) 12,000 3) 25 4) 5 5) 50	1) Instantaneous 2) 25 gpm 3) Instantaneous 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	1, 2, 3, 5	Tank rupture could flow south or southeast toward tributaries to James River. Piping leak or overfill would be contained in the area containment.
10,000-gal AST* Product: Bilge Water Tank ID: 410-3 (ASUS)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 5 2) 5 3) 3 4) 3 5) 3	1) 10,000 2) 720 3) 125 4) 5 5) 50	1) 10,000 gpm (instantaneous) 2) 720 gal per hr 3) 125 gpm 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	3, 5	Tank overflow or rupture would flow toward on-site storm drains or to Skiffes Creek. Piping leak would be contained in the general vicinity and migrate radially on the concrete surface.
6,000-gallon AST Product: Gasoline Tank ID: 2734-9 (TVRP) (Expected to be turned over to Government in 2021)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 5 2) 5 3) 3 4) 3 5) 3	1) 6,000 2) 720 3) 125 4) 5 5) 50	1) 6,000 gpm (instantaneous) 2) 720 gal per hr 3) 125 gpm 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	1, 2, 3, 5	Tank rupture could flow south or southeast toward tributaries to James River. Piping leak or overfill would be contained in the area containment.
3,000-4,000 gal sub-base generator AST Product: Diesel Tanks: 2300-1, 661-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 7 2) 5 3) 3 4) 3	1) up to 4,000 2) up to 4,000 3) 25 4) 300	1) Instantaneous 2) <3 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 2, 3	Releases would flow toward on-site storm drains.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
1,000-gallon AST Product: Jet A Tank ID: 2451-8 (FAA) (Expected to be turned over to Government in 2021)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 5	1) 1,000 2) 1,000 3) 25 4) 5	1) Instantaneous 2) <2 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 2, 3, 5	Tank overflow or rupture would flow southwest and southeast to low wet areas and ultimately to James River. Piping leaks and overfills will be contained in the containment area.
1,000-2,999 gal sub-base generator AST Product: Diesel Tanks: 667-1, 1504-1, 691-1, 692-2, 1387-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 5	1) up to 2,999 2) up to 2,999 3) 25 4) 300	1) Instantaneous 2) <2 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 2, 3	Releases would flow toward on-site storm drains, surrounding soil, drainage ditches

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
55-999 gal sub-base DW generator AST Product: Diesel Tanks: 002-1, 006-1, 009-1, 120-1 LS*, 121-1 LS, 401-1, 451-4, 601-1, 601-2, 648-2, 661-1, 662-1, 705-1, 705-2, 825-1, 839-1, 842-1 LS*, 890-1 AWS, 900-1, 1013-1, 1013-2, 1028-1, 1034-1, 1382-1, 1406-1, 1406-3, 1406-4, 1407-1, 1408-1, 1410-2, 1413-1, 1503-1, 1605-1, 1618-1 WT, 1700-1, 1906-1 LS*, 2023-1, 2401-1, 2401-2 LS*, 2417-1, 2517-1, 2717-1, 2713-1 LS*, 2734-1, 2921-1 LS*, 3303-1 LS*, 3305-1 LS*, 3512-1 LS*, 23rd/Bldg. 100	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 5	1) up to 999 2) up to 999 3) 25 4) up to 300	1) Instantaneous 2) <0.7 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 2, 3	Release from tank would flow toward on-site storm drains, surrounding oil, and drainage ditches. Release from piping would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
2,000-gal AST (Convault) Product: Diesel Fuel Tanks: 460-5 Location: Third Port Area (Bldg. 460)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 3 2) 3 3) 3 4) 6	1) 2,000 2) 2,000 3) 25 4) 5	1) Instantaneous 2) 1.4 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 3	Release would flow towards to Skiffes Creek. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
500-gal AST (Convault, for generator) Product: Diesel Fuel Tanks: 210-1, 587-1, 1754-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 8	1) 500 2) 500 3) 25 4) 5	1) Instantaneous 2) 0.3 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 3	Release would flow towards to drainage ditch or Skiffes Creek. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
500-1,000 gal AST (Convault) Product: Used Oil Tanks: 438-2, 460-4, 660-1, 668-1, 836-4, 1411-3, 1415-1, 2448-1, 2505-1, 2606-7, 2606-8, 2702-3, 2743-1 , 2750-4, 2750-5	1) Container rupture 2) Container leak 3) Container overfill 4) Filling error	1) 5 2) 5 3) 5 4) 3	1) up to 1,000 2) up to 1,000 3) 5 4) 5	1) Instantaneous 2) <0.7 gpm 3) Instantaneous 4) Instantaneous	1, 2, 3, 4	1, 2, 3	Tank release would flow toward on-site storm drains or to Skiffes Creek. Overfill would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
264-528-gal AST (Myers pod) Product: Used Oil Tanks: 806-1, 2414-1	1) Container rupture 2) Container leak 3) Container overfill 4) Filling error	1) 5 2) 5 3) 5 4) 3	1) 528 2) 528 3) 5 4) 5	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) Instantaneous	1, 2, 3, 4	1, 2, 3	Release would flow toward on-site storm drain and then to Eustis Lake or Morrison's Creek. Overfill would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
500-1,000-gal AST (Convault) Product: Diesel and gasoline Tanks: 1428-1, 3506-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 3 2) 3 3) 3 4) 3	1) 1,000 2) 300 3) 25 4) 5	1) Instantaneous 2) 0.7 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 2, 3	Release would flow to surrounding area then to wetland area nearby.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
500 - 750-gal AST Product: Jet A Tanks: 2451-3, 3517-1 (2451-3 expected to be permanently removed from service in 2021)	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak (Tank 2451-3 only)	1) 3 2) 3 3) 3 4) 3 5) 3	1) up to 750 2) up to 750 3) 25 4) 5 5) 300	1) Instantaneous 2) <0.5 gpm 3) Instantaneous 4) 5 gpm 5) 5 gpm	1, 2, 3, 4	1, 2, 3	Release would flow towards storm drains, Skiffes Creek, or James River. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
300-700-gal day tank (DW) Product: Diesel Tanks: 460-6, 515-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Fill line rupture or leak	1) 3 2) 3 3) 3 4) 3 5) 3	1) up to 700 2) up to 700 3) 25 4) 5 5) 50	1) 700 gpm (instantaneous) 2) 0.5 gpm 3) 25 gpm 4) 5 gpm 5) 50 gpm	1, 2, 3, 4	1, 2, 3	Release would flow towards to storm drains and Skiffes Creek. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
270 - 612-gal mobile generator tanks Product: Diesel Tanks: 2612-1, 1406-2, 1406-5	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 8 2) 5 3) 8 4) 5	1) up to 612 2) up to 612 3) 5 4) up to 612	1) Instantaneous 2) <0.4 gpm 3) 5 gpm 4) 1 gpm	1, 2, 3, 4	1	Release would flow to storms drains and eventually to Eustis Lake or James River. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
250-500 gal AST (Convault) Product: Fuel Oil #2 (heating oil) Tanks: 843-1, 1405-1, 1423-1, 3507-2, 3509-2, 3523-1, 3905-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 3 2) 3 3) 5 4) 5	1) up to 500 2) up to 500 3) 25 4) up to 300	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1	Tank overflow or rupture would flow toward on-site storm drains and then to Eustis Lake, Warwick River, or Morrison's Creek. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
500-gal AST (Convault, OOS) Product: Gasoline Tanks: 843-2, 866-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 5	1) 500 2) 500 3) 5 4) 10	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 2 gpm	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward on-site storm drains and then to Eustis Lake or Bailey Creek. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
240-500-gal AST (DW) Product: Used Oil Tanks: 886-1, 886-2, 1208-1, 1383-1, 2505-2	1) Container rupture 2) Container leak 3) Container overfill 4) Filling error	1) 5 2) 5 3) 3 4) 5	1) up to 500 2) up to 500 3) 5 4) 5	1) Instantaneous 2) 0.3 gpm 3) Instantaneous 4) Instantaneous	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward on-site storm drains or to James River. Piping leak would be contained in the containment area and migrate radially on the concrete surface.
110 - 500-gallon AST (DW w/ mounted dispenser) Product: Diesel Tanks: 1209-1, 1423-2, 3302-1, 3941-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Dispensing error	1) 5 2) 5 3) 5 4) 8 5) 8	1) up to 500 2) up to 500 3) 5 4) 1 5) 10	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 1 gpm (volume of hose) 5) 2 gpm	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward on-site storm drains and then to Eustis Lake or Warwick River or across gravel to Eustis Lake. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
500-gallon AST (DW, OOS) Product: Off-Spec Fuel Tanks: 1209-2, 1209-3	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 5	1) 500 2) 500 3) 5 4) 10	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 2 gpm	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow across gravel to Eustis Lake. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
500-gallon AST (Convault w/ mounted dispenser) Product: Diesel Tanks: 2015-1, 2606-1, 3941-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Dispensing error	1) 5 2) 5 3) 5 4) 8 5) 8	1) 500 2) 500 3) 5 4) 1 5) 10	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 1 gpm (volume of hose) 5) 2 gpm	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward on-site storm drains or wet ditches and then to James River or Warwick River. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
70-500-gallon AST (DW, fire suppression system) Product: Diesel Tanks: 589-1, 703-1, 1416-1, 2404-1, 2404-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 3 4) 5	1) up to 500 2) up to 500 3) 5 4) up to 300	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 5 gpm	1, 2, 3, 4	1, 2, 3, 4	Tank overflow or rupture would flow toward onsite storm drains or drainage ditches to Warwick River, Bailey Creek, Eustis Lake, or James River. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
100-500-gallon AST (DW w/ mounted dispenser) Product: Gasoline Tanks: 2606-2. 3302-2, 3520-1, 3941-3	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture 5) Dispensing error	1) 5 2) 5 3) 5 4) 8 5) 8	1) up to 500 2) up to 500 3) 5 4) 1 5) 10	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 1 gpm (volume of hose) 5) 2 gpm	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward onsite storm drains, drainage ditches, or retention areas to Warwick River or James River. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
250-500 gal AST (DW) Product: Fuel Oil #2 (heating oil) Tanks: 3910-1, 3911-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 8	1) up to 500 2) up to 500 3) 5 4) up to 500	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) 2 gpm	1, 2, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward onsite storm drains to Warwick River. Piping leak would be contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
317-gal AST (DW) Product: Used Cooking Oil Tanks: 1386-1, 2300-2	1) Container rupture or overturn 2) Container leak 3) Container overfill 4) Fill error	1) 5 2) 5 3) 8 4) 8	1) 317 2) 317 3) 5 4) 5	1) Instantaneous 2) 0.2 gpm 3) Instantaneous 4) Instantaneous	1, 3, 4	1	Container release would flow toward on-site storm drains or contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
300-500-gal AST (DW) Product: Motor Oil Tanks: 1383-2, 1383-3	1) Container rupture 2) Container leak 3) Container overfill 4) Piping	1) 5 2) 5 3) 5 4)	1) up to 500 2) up to 500 3) 5 4) 1	1) Instantaneous 2) <0.4 gpm 3) Instantaneous 4) Instantaneous	1, 2, 3, 4	1, 2, 3	Container release would flow out of building and then south ~ 50 feet to storm drain or contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
275-gal AST (DW plastic) Product: Used Oil Tanks: 2606-3, 2606-4, 2606-5, 2606-6	1) Container rupture or overturn 2) Container leak 3) Container overfill 4) Fill error	1) 5 2) 5 3) 5 4) 3	1) 275 2) 275 3) 5 4) 5	1) Instantaneous 2) 0.2 gpm 3) Instantaneous 4) Instantaneous	1, 3, 4	1, 2, 3	Tank overflow or rupture would flow toward a retention area and then to the James River.
250-gal AST (SW, diked) Product: Used Cooking Oil Tanks: 675-1, 695-1, 695-2, 828-1, 950-3, 1328-1, 1382-2, 2123-1, 3520-2	1) Container rupture or overturn 2) Container leak 3) Container overfill 4) Filling error	1) 5 2) 5 3) 4 4) 8	1) 250 2) 250 3) 5 4) 5	1) 250 gpm 2) 0.2 gpm 3) Instantaneous 4) Instantaneous	1, 3, 4	4	Container release would flow toward on-site storm drains or contained in the general vicinity and potentially migrate radially on the ground surface and into substrate.
90-240-gal AST (elevator) Product: Hydraulic oil Tanks: 210-2, 300-1, 661-3, 661-4, 672-1, 705-3, 886-3, 1012-1, 1034-2, 1504-2, 1900-1, 1900-2, 2123-1, 2123-2, 2421-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 5	1) 90-240 2) 90-240 3) 5 4) 5	1) Instantaneous 2) <2 gpm 3) Instantaneous 4) <1 gpm	1, 3, 4	4	Contained in building.
190-gal AST (elevator) Product: Hydraulic oil Tanks: 662-2, 2115-1	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 5 4) 8	1) 190 2) 190 3) 5 4) 5	1) Instantaneous 2) 0.1 gpm 3) Instantaneous 4) Instantaneous	1, 3, 4	2, 4	Release would flow toward on-site storm drain and then to Eustis Lake or Warwick River.
250-gal AST (SW, no containment) Product: Used Cooking Oil Tanks: 677-1	1) Container rupture or overturn 2) Container leak 3) Container overfill 4) Fill error	1) 5 2) 5 3) 4 4) 8	1) 250 2) 250 3) 5 4) 5	1) 250 gpm 2) 0.2 gpm 3) Instantaneous 4) Instantaneous	1, 3, 4	None	Release would flow toward on-site storm drain.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
5,000-gal Tank Truck Product: Jet A Tanks: TT-1, TT-2	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 3 3) 3 4) 3	1) 5,000 2) 5,000 3) 125 4) 5	1) Instantaneous 2) 3.5 gpm 3) 25 gpm 4) 5 gpm	1, 2, 3, 4	1, 2, 3, 5	Tank overflow or rupture would flow toward on-site storm drains or to Blows Creek and eventually to the James River. Piping leak would be contained in the containment area and migrate radially on the concrete surface.
2,000-gal Tank Truck Product: Jet A Tanks: TT-3	1) Container rupture 2) Container leak 3) Container overfill 4) Piping leak/rupture	1) 5 2) 5 3) 3 4) 3	1) 2,000 2) 2,000 3) 125 4) 5	1) Instantaneous 2) 3.5 gpm 3) 25 gpm 4) 5 gpm	1, 2, 3, 4	1, 2, 3, 5	Tank overflow or rupture would flow toward on-site storm drains or to Blows Creek and eventually to the James River. Piping leak would be contained in the containment area and migrate radially on the concrete surface.
55-gallon drum Products: Engine Oil, Hydraulic Oil, Lubricating Oil Bldgs.: 426, 454, 455, 806, 836, 886, 1209, 1411, 2504, 2505, 2743, 2750, 3528	1) Container rupture or overturn 2) Container leak	1) 5 2) 5	1) 55 2) 55	1) Instantaneous 2) <0.5 gpm	1, 3	4, 5	Out of building to storm drains, drainage ditch, storm water retention pond, Eustis Lake, soil/concrete/pavement, wetlands, and/or OWS.
55-gallon drum Products: Engine Oil, Hydraulic Oil, Lubricating Oil Bldgs.: 845	1) Container rupture or overturn 2) Container leak	1) 5 2) 5	1) 55 2) 55	1) Instantaneous 2) <0.5 gpm	1, 3	4, 5	To interior floor drain to storm water system

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
55-gallon drum Products: Engine Oil, Hydraulic Oil, Lubricating Oil Bldgs.: 2743	1) Container rupture or overturn 2) Container leak	1) 5 2) 5	1) 55 2) 55	1) Instantaneous 2) <0.5 gpm	1, 3	4, 5	To interior floor drain to waste water system
55-gallon drum Products: Engine Oil, Hydraulic Oil, Lubricating Oil Bldgs.: 433, 460, 2505, 2750	1) Container rupture or overturn 2) Container leak	1) 5 2) 5	1) 55 2) 55	1) Instantaneous 2) <0.5 gpm	1, 3	4, 5	Contained in building.
55-gallon drum Products: Used Oil Bldgs.: 454, 836, 886, 1209, 2750, 3528	1) Container rupture or overturn 2) Container leak 3) Container overfill or filling error	1) 5 2) 5 3) 5	1) 55 2) 55 3) 5	1) Instantaneous 2) <0.5 gpm 3) Instantaneous	1, 3	4, 5	Out of building to storm drains, drainage ditch, storm water retention pond, Eustis Lake, soil/concrete/pavement, and/or wetlands.
55-gallon drum Products: Used Oil Bldgs.: 460, 1406, 2750	1) Container rupture or overturn 2) Container leak 3) Container overfill or filling error	1) 5 2) 5 3) 5	1) 55 2) 55 3) 5	1) Instantaneous 2) <0.5 gpm 3) Instantaneous	1, 3	4, 5	Contained in building.
55-gallon drum Products: Used Oil Bldg: 845	1) Container rupture or overturn 2) Container leak 3) Container overfill or filling error	1) 5 2) 5 3) 5	1) 55 2) 55 3) 5	1) Instantaneous 2) <0.5 gpm 3) Instantaneous	1, 3	4, 5	To interior floor drain to storm water system.

Container Type, Product, Applicable Tank Nos.	Potential Type of Container or Equipment Failure	1) Probability and 2) Severity of Spill	3) Potential Spill Quantity (gallons)	4) Potential Spill Flow Rate	5) Spill Prevention Measures	6) Spill Control Measure	7) Potential Spill Flow Direction
55-gallon drum Products: Diesel Bldg: 2743	1) Container rupture or overturn 2) Container leak 3) Container overfill or filling error	1) 5 2) 5 3) 5	1) 55 2) 55 3) 5	1) Instantaneous 2) <0.5 gpm 3) Instantaneous	1, 3	4, 5	Out of building to pavement.

*Container is owned and operated by ASUS. Information is presented in this table for information only. JBLE-Eustis is not responsible for the operation and maintenance of these containers, but may assist in responding to a release.

DW = Double-walled

OOS = Out of service

SW = Single-walled

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ATTACHMENT 3I
SPILL RESPONSE CONTRACT SUPPORT

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SPILL RESPONSE CONTRACT SUPPORT[85]

HEPACO, Inc. has been selected by JBLE-Eustis as its OSRO. A variety of DoD contracts are available to access the services of HEPACO:

- Blanket Purchase Agreements (BPA) issued by Army Materiel Command/Army Contracting Command/Army Mission and Installation Contracting Command provide for emergency spill response by a variety of contractors. HEPACO is available via BPA Contract No. W911SD19A0017 (expires 8/12/2024).
- Air Force Material Command/Air Force Life Cycle Management Center issued a contract (No. FA860120A0036) to HEPACO for "Remediation for Hazardous Substance Emergency Response". The contract expires 10/31/25.
- Air Force/Air Combat Command/9th Air Force issued a contract (No. FA480016A0007) to HEPACO for "Hazardous Material Spill Containment and Clean-up Equipment and Material". The contract expires 9/23/21.
- The Department of Homeland Security, US Coast Guard, issued a contract to several contractors, including HEPACO, for emergency response services for the containment, cleanup, and/or mitigation of oil spills and hazardous substance incidents on or in waters of the US. HEPACO's contract number is 70Z08420GP0006400 and expires 1/7/23.

Twenty-four hours, seven days-a-week response services will be made available upon request by:

Physical Address

HEPACO Inc.
1301 Marsh Street
P.O. Box 1779
Norfolk, Virginia 23501-1779

Contact Information

(24 hours): **1-800-888-7689**

Point of Contact Telephone: (757) 543-5718
Point of Contact Fax: (757) 543-4561

1. HEPACO, Inc. (HEPACO) is recognized by the U.S. Coast Guard as an OSRO for inland rivers and canals and for inland/nearshore areas. It is capable of responding to maximum most probably discharge and worst case discharge scenarios from facilities and vessels in the Hampton Roads USCG District. HEPACO has vehicles that are pre-loaded with equipment in the Norfolk/Hampton Roads area and this equipment can be ready for deployment within 30 minutes of notification during regular working hours. HEPACO indicates that these vehicles would be ready for deployment during off-duty hours within 2 hours of notification.[86] HEPACO can provide pollution standby and/or booming services to meet the U.S. Coast Guard 1 hour response requirement.
2. From the time of departure until arrival at the JBLE-Eustis, a 1 hour time/distance planning factor is applicable during light traffic conditions. For the worst case spills described in the ICP, the HEPACO cleanup equipment and personnel assets listed are more than adequate to contain and recover the contamination assumed in these scenarios (**Attachment 3F**).

[85] 40 CFR Part 112 Appendix F 1.5.1.1, 1.5.2, 1.7.1; 33 CFR §154.1026; 33 CFR §154.1028
[86] 40 CFR Part 112 Appendix F 1.3.4

3. JBLE-Eustis has substantial capabilities to limit the spill pathways and contain the spill, until HEPACO arrives on the scene to augment the recovery efforts. A certification in the Preparedness for Response Exercise Program has been provided by HEPACO. Additional information on HEPACO is provided below.
4. Maintenance Contractors. For the worst case spills described in the ICP, the HEPACO clean-up equipment and personnel assets listed are more than adequate to contain a worst case discharge volume. JBLE-Eustis does not have an in place commercial contractor for regular maintenance, repair, and testing support to their oil storage and transfer facilities. When immediate emergency purchase order contracts are required, the CEIE has authority to issue contracts telephonically, 24 hours-a-day, to an outside contractor.

List of Emergency Response Contractors

Contractor	Phone	Response Time
HEPACO, Inc.	1-800-888-7689 (24 hour)	1 hour
Mr. Bryan Genzler (Point of Contact)	757-543-5718	30 minutes

ATTACHMENT 3J
FACILITY RESPONSE FOR OIL DISCHARGE

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FACILITY RESPONSE FOR OIL DISCHARGES[87]

1 FACILITY RESPONSE FOR OIL DISCHARGES

1.1 Actions by Initial Responders

The initial assessment of a spill event will be made either by the storage/transfer facility foreman/manager or the responding elements from JBLE-Eustis FES. The situation will be reviewed, the fuel flow will be stopped and, if possible, contained, and the threat of fire will be mitigated. Quick estimates will be made on the amount of fuel spilled and notification will be immediately made to the Fire Chief (IC).

The FES, as the first responder, will alert JBLE-Eustis Military Police, additional FES assets or other emergency services, as appropriate. The Senior Fire Official arriving on-scene will serve as the acting IC, until such time the person is relieved of these duties by the Fire Chief. Upon notification of the size and threat of the spill, the Fire Chief may choose to relocate to the spill site to make a personal assessment or, in cases of smaller spills, to dispatch appropriate CES personnel to assess the situation and assist FES. The Fire Chief, upon arriving at the spill site, may assume the duties as IC, leave the Senior Fire Official as the designated IC, or appoint others, as appropriate, to assume IC duties.

Based upon the magnitude and spill threat, the Fire Chief may activate the installation FRT and alert the spill cleanup contractor (OSRO) and other appropriate agencies or offices on the notification list. If further assessment indicates that the spill is likely to enter State waters, the IC may order the placement of boom at specific locations along the spill pathway and direct the construction of earthen barriers. If the spill is beyond the cleanup capability at JBLE-Eustis, the QI will notify appropriate spill response contractor (OSRO) to reinforce the FRT. Notification will be made to the USCG Sector Hampton Roads if the spill effects the James River, Warwick River, or Skiffes Creek.

For spills beyond the cleanup capability of FES, the QI or IC will alert and activate the FRT, brief the FRT on the situation, then execute the JBLE-Eustis ICP. The JBLE-Eustis Spill Management Team consists of the JBLE-Eustis FES, the FRT, and the spill response contractor (OSRO).

1.2 Spill Classifications

JBLE-Eustis oil spill incidents are classified under three categories:

Level 1 - Spills under 100 gallons, within the immediate facility's cleanup and containment capability. For spills in this category, the FRT may be placed on standby until the Fire Chief assesses the situation. The CES may designate the CEIE Chief or the Facility Supervisor to be in charge of the cleanup and remediation effort.

Level 2 - Spills over 100 gallons and/or beyond the immediate facility's cleanup and containment capability, but within the FRT's capability. The Fire Chief or his designated representative will serve as the IC and will marshal JBLE-Eustis assets under the FRT to contain and clean up the spill. Appropriate spill contractor (OSRO) is alerted, but not deployed, unless later determined to be needed.

Level 3 – Worst Case Scenario Spills will require a combination of resources at JBLE-Eustis, requiring immediate spill cleanup contractor response and support. Large spills, which

[87] 40 CFR Part 112 Appendix F 1.7

significantly threaten the environment or worst case discharges (**Annex 3, Appendices E and F**), fall into this category. The Fire Chief will assume IC duties, alert the spill contractor for immediate response and augmentation, then direct the overall cleanup and containment effort, using FRT assets and further augmentation from other nearby military installations.

1.3 Reportable Spills

Spills of 25 gallons or greater on land or spills that impact waters of the State will be reported to the VDEQ and to the National Response Center. Refer to **Annex 2 (Notifications)**.

1.4 Installation On-Scene Coordinator Duties

Once the Fire Chief is notified of a spill event and relocates to the spill site for a firsthand assessment, the Fire Chief will assume responsibilities as the IC. After consultation with the Senior Fire Official, the Fire Chief will refer to **Annex 2 Tables A2-1 and A2-2** and make appropriate notifications. In a Level 3 (worst case) spill event, the Fire Chief will engage the JBLE-Eustis employees and supervisory personnel at the spill site, the FRT, the JBLE-Eustis emergency services (fire, police and rescue), and contract resources (OSRO) to further contain the spill, minimize the risk of fire, and to initiate cleanup. As additional information arrives on the effects of the spill, the IC, with assistance from HEPACO (OSRO), will adjust the response plan to new priorities and requirements. If additional assets are needed, the QI will request assistance from the installation Chief of Staff and other nearby military installations or other contractual resources.

2 PROTECTION AND CLEANUP PRIORITIES, METHODS AND TECHNIQUES

2.1 Recovery Strategy for Spills

The recovery strategy for spills at JBLE-Eustis is driven by both policy and practicality. JBLE-Eustis and the VDEQ policy and regulatory guidance direct that spills will be contained and mechanically recovered, as appropriate. Provisions are included that allow for other methods (dispersants, bioremediation, etc.) to be considered and/or used under certain conditions, provided that prior approval has been granted by the VDEQ, USCG, and USEPA.

JBLE-Eustis' initial response strategy for a spill of various types of oil is to contain the spill in a defined area and focus initial spill response assets on the protection of priority sensitive areas near the spill site. Given the availability of spill response equipment at the installation, this strategy is both feasible and achievable. Once the fuel is contained, skimmers, vacuum trucks, and pumps will be deployed to recover the oil, as appropriate, with these assets coming from the spill response contractor.

The basic group of fuels stored at JBLE-Eustis consists of non-persistent oils (Jet A, light diesel, and some gasoline). During a spill incident, these materials will have a tendency to spread over the water and volatize faster than heavier, more viscous oils such as unrefined crude oil. Gasoline can produce explosions and fire hazards during recovery operations and only the spill response contractor should attempt to recover this product.

If a large amount of fuel is spilled inside an earthen containment area, a water layer (1 to 2 inches) can be pumped into the basin to prevent the fuel from percolating into the water table. If it appears that an appreciable amount of fuel has seeped into the ground beneath the dike basin, it can be recovered through trenches and/or recovery wells. If a large spill occurs outside the diked areas and it appears that an appreciable amount has seeped into the ground, the CES and/or CEIE must define the affected area and ascertain the direction of migration within the soil, then, working with

the IC, develop a plan to contain and recover the fuel. The extent of the spill can usually be determined by digging a network of trenches until the contaminated zone has been bracketed.

Pooled Jet A in large amounts, confined to land, will be recovered only by the spill response contractor. The contractor has explosion proof vacuum trucks, pumps, and large quantities of connecting hose that can be used in recovery operations and the response personnel are specially trained in the use of this equipment. The recovered fuel will typically be transferred to tank trucks and hauled directly to a used oil vendor. If large quantities of pooled fuel are being recovered, FES should be present during the recovery operations.

Jet A or gasoline that enters the ditches, brooks, creeks, and tributaries around JBLE-Eustis, in general, will not be recovered. Gasoline and Jet A present dangers and unacceptable risks in water recovery operations for responders. Booming is normally used with volatile fuels to protect sensitive environmental areas or municipal facilities near the spill site. The boom is placed in front of a spill to deflect the contaminating fuel from the sites, guiding the product away from sensitive areas and keeping the fuel away from the shoreline. The lighter fuels tend to breakup, evaporate, and disperse rather quickly and more frequently. The best mitigation strategy initially is to let the fuel evaporate and not try to recover it in the water. Diesel fuel and oily bilge water are less volatile than gasoline or Jet A, and, in general, should be recovered via the use of booms with absorbent pads, vacuum truck, and/or skimmer, as appropriate. A decision to attempt any recovery of fuel off the water would be made by the IC with involvement of the JBLE-Eustis Safety Officer.

Spills of less volatile oils, such as used oil, will be contained and removed as quickly as possible. The danger to recovery personnel is much less, and allows relatively unrestricted recovery of the product from both land and water spills. The faster the persistent oil is recovered, the less chance there is of long term effects from oil residue becoming embedded in environmentally or health sensitive areas.

2.2 Protection Priorities

The first priority in any spill is always the protection of human life and health. This priority remains paramount throughout all phases of the response effort. Maximum human protection from a spill at JBLE-Eustis is achieved by timely evacuation (if required), effective containment to areas away from inhabited residences and workplaces, and prompt cleanup.

In accordance with both JBLE-Eustis policy and the Virginia Area Contingency Plan (ACP), the next priority is to protect natural resources and minimize ecological impacts. At JBLE-Eustis, the primary effort should be containing the spill and preventing its escape into the streams and tributaries outside of the installation.

The third priority is to minimize economic and public impact. Actions taken to achieve the first two priorities above will also achieve this goal. The most effective immediate action to minimize public impact is by extensive booming to prevent spilled oil from entering the James River.

2.3 Cleanup, Protection, and Booming

Vegetation, fish, game, and wildlife within the immediate area of a spill will be exposed to high levels of oil.

Cleanup of spills reaching the wetlands areas will be impossible during the adverse weather described in the worst case discharge and most actions will be focused on protection of these areas by booming. Use of dispersants will be impractical due to the potential environmental impact and the unlikelihood of securing additional JBLE-Eustis, VDEQ, USCG, and USEPA approval. Even booming will be difficult due to the thick vegetation and the debris in the water.

Outside contracted spill response assets will be immediately focused in multiple areas – cordoning off and booming the main drainage and wetlands areas, as well as cleanup on the land at the spill site. The spill removal organizations have available disposal trained specialists and appropriate recovery equipment, vacuum trucks, pumps, connecting hoses, and absorbent materials.

Follow-on wetlands cleanup actions may have to be initiated once the damage has been assessed. The QI will coordinate with the VDEQ and Federal officials on any JBLE-Eustis plan to cleanup a wetlands area, before cleanup is initiated. **Some cleanup and remediation efforts can do more harm to the impacted area than the spill itself, and this must be avoided.**

The IC will normally have to rely on the primary spill response contractor to help develop and implement a proper wetlands cleanup strategy, but the QI must give the go-ahead authorization before cleanup work is initiated. The impact on wildlife may further require the establishment of bird and mammal cleaning stations and additional augmentation of environmental specialists. If bioremediation is to be employed, the QI should seek advanced approval from the VDEQ before implementation.

2.4 Prioritized Response Procedures in the Event of a Spill

The following prioritized procedures are directly applicable to spills originating from hose failures, piping ruptures, piping leaks, valve (manifold) failures, pump malfunctions, tank overfill situations, a tank failure, or an explosion or fire:

- Alert on-site personnel by voice, hand-held radio, intercom, or telephone/cell phone.
- Shut down all pumps and on-going transfer operations in coordination with other facility transfer personnel.
- Isolate the rupture (or leak) by closing valves on either side of a break.
- Activate the fire alarm system, if appropriate and available.
- Notify FES.
- Evacuate non-essential personnel to safe areas.
- Eliminate sources of ignition.
- If the spill involves a large amount of fuel, turn master power switches to the OFF position.
- Continuously check for safety hazards.
- Pass control at the spill site to the Senior Fire Official.
- The Senior Fire Official will confirm or determine initial containment priorities and actions and will notify the Fire Chief of the spill.
- The Fire Chief, upon arrival at the spill site, will coordinate with the Senior Fire Official on evacuation plans and initiate evacuations, as needed.
- The Senior Fire Official will establish on-site safety zones (hot, warm and cold), as required.
- The QI or IC will alert the FRT.
- The CES will direct emergency repairs, as necessary.
- The Senior Fire Official will monitor use of PPE.
- Non-essential vehicles will be evacuated from the spill site, if safe to do so.
- Military Police will establish access control points.
- Containment operations will be initiated with designated personnel.
- The Fire Chief will assume IC duties or designate an acting IC and make remaining external notifications (spill response contractors may be alerted for deployment).

- The IC, working with the FRT, will monitor and oversee all on-scene response operations.
- The QI and IC will support the State and/or Federal On-Scene Coordinator, if one is appointed.
- The QI will provide the required situation reports to the Installation Chief of Staff, the USEPA, the USCG, and the VDEQ.
- The FES will establish and operate a shower point and decontamination station for workers who have contacted liquid fuel.
- Responders will recover and remove contaminated soil to a disposal site. Pooled fuel will be recovered through the use of vacuum trucks or pumps and boom deployment, as appropriate.
- The QI and IC will transition to the broader and more detailed JBLE-Eustis **ICP Annex 3**.
- The QI will initiate a post discharge review procedures to include:
  - Investigation of the cause of the spill,
  - Plans for preventing future spills.
- Based on the results of the post discharge review, the QI will assess the needs for additional response training for FRT personnel based on the lessons learned in the response procedures used during the response to an actual incident.
- Based on the results of the post discharge review, the QI will assess the needs for response training for the FRT personnel based on the lessons learned in the response procedures used during the response to an actual incident and apply them to training practice drills when implementing this Plan.
- The QI, with primary assistance from the FRT and outside spill response contractors, will complete mitigation procedures.
- Primary responsibility for response, recovery, cleanup and mitigation of spills on land or water, originating from facilities and equipment at JBLE-Eustis, rests with authorities at the installation, represented by the QI.

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ATTACHMENT 3K
LIST OF THREATENED AND ENDANGERED SPECIES[88]

[88] 40 CFR Part 112 Appendix F 1.4.2

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VaFWIS Search Report Compiled on 11/18/2020, 11:50:33 AM

Known or likely to occur within a **3 mile radius around point 37,07,51.6 -76,37,27.2**
in **093 Isle of Wight County, 095 James City County, 181 Surry County, 700 Newport News City, VA**

View Map of Site Location

622 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 40) (40 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name
030074	FESE	Ia	Turtle, Kemp's ridley sea	Lepidochelys kempii
040228	FESE	Ia	Woodpecker, red-cockaded	Picoides borealis
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus
030075	FESE	Ic	Turtle, leatherback sea	Dermochelys coriacea
030071	FTST	Ia	Turtle, loggerhead sea	Caretta caretta
040144	FTST	Ia	Knot, red	Calidris canutus rufa
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis
040120	FTST	IIa	Plover, piping	Charadrius melodus
010347	SE	Ia	Sunfish, blackbanded	Enneacanthus chaetodon
030064	SE	Ia	Turtle, eastern chicken	Deirochelys reticularia reticularia
040110	FPSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis
050020	SE	Ia	Bat, little brown	Myotis lucifugus
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus
020052	SE	IIa	Salamander, eastern tiger	Ambystoma tigrinum
030013	SE	IIa	Rattlesnake, canebrake	Crotalus horridus
040096	ST	Ia	Falcon, peregrine	Falco peregrinus
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei
020002	ST	IIa	Treefrog, barking	Hyla gratiosa
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin
030063	CC	IIIa	Turtle, spotted	Clemmys guttata
010077		Ia	Shiner, bridle	Notropis bifrenatus
040040		Ia	Ibis, glossy	Plegadis falcinellus
070131		Ic	Isopod, Phreatic	Caecidotea phreatica
020063		IIa	Toad, oak	Anaxyrus quercicus
040052		IIa	Duck, American black	Anas rubripes
040033		IIa	Egret, snowy	Egretta thula
040029		IIa	Heron, little blue	Egretta caerulea caerulea
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea
040192		IIa	Skimmer, black	Rynchops niger
040181		IIa	Tern, common	Sterna hirundo
040320		IIa	Warbler, cerulean	Setophaga cerulea
040140		IIa	Woodcock, American	Scolopax minor

040203		IIb	Cuckoo, black-billed	Coccyzus erythropthalmus
040105		IIb	Rail, king	Rallus elegans
040304		IIc	Warbler, Swainson's	Limnothlypis swainsonii
100003		IIc	Skipper, rare	Problema bulenta

To view **All 622 species** View 622

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier Virginia Widlife Action Plan Conservation Opportunity Ranking:
a - On the ground management strategies/actions exist and can be feasibly implemented.; b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Anadromous Fish Use Streams (4 records) View Map of All Anadromous Fish Use Streams

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C41	Lawnes creek	Confirmed	2			Yes
C92	James River 1	Confirmed	6		IV	Yes
P145	Skiffes creek	Potential	0			Yes
P176	Warwick river	Potential	0			Yes

Impediments to Fish Passage (1 records) View Map of All Fish Impediments

ID	Name	River	View Map
803	EUSTIS DAM	TR-JAMES RIVER	Yes

Threatened and Endangered Waters (11 Reaches) View Map of All Threatened and Endangered Waters

Stream Name	T&E Waters Species							View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name						
James River (0162815)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0163132)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0165875)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0168836)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0169252)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0174908)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0175258)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0175357)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0176134)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0181134)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes
James River (0183195)	FESE	010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		Yes

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

are present. View Map of Bald Eagle Concentration Areas and Roosts

(5 records)

BECAR ID	Observation Year	Authority	Type	Comments
47	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Summer Concentration Area	Eagle_use H
48	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Summer Concentration Area	Eagle_use L
49	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Summer Concentration Area	Eagle_use M
51	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Winter Concentration Area	Eagle_use L
52	2006 - 2007	Center for Conservation Biology at the College of William and Mary/Virginia Commonwealth University	Winter Concentration Area	Eagle_use M

Bald Eagle Nests (9 records) View Map of All Query Results Bald Eagle Nests

Nest	N Obs	Latest Date	DGIF Nest Status	View Map

IW0502	2	May 15 2005	HISTORIC	Yes
IW0802	2	Apr 23 2008	Unknown	Yes
IW9602	2	Apr 15 1996	HISTORIC	Yes
JC0503	8	Apr 28 2008	Unknown	Yes
NN0201	7	Apr 28 2008	HISTORIC	Yes
NN0601	7	Apr 28 2008	Unknown	Yes
NN8701	24	Jan 1 2002	HISTORIC	Yes
SU0401	8	Apr 23 2008	HISTORIC	Yes
SU0503	7	Apr 23 2008	UNKNOWN	Yes

Displayed 9 Bald Eagle Nests

Habitat Predicted for Aquatic WAP Tier I & II Species (1 Reach) View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
James River (20802061)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
James River (20802061)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Habitat Predicted for Terrestrial WAP Tier I & II Species (6 Species) View Map of Combined Terrestrial Habitat Predicted for 6 WAP Tier I & II Species Listed Below

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040110	FPSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis	Yes
030013	SE	IIa	Rattlesnake, canebrake	Crotalus horridus	Yes
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii	Yes
020044	ST	IIa	Salamander, Mabee's	Ambystoma mabeei	Yes
030067	CC	IIa	Terrapin, northern diamond-backed	Malaclemys terrapin terrapin	Yes
020063		IIa	Toad, oak	Anaxyrus quercicus	Yes

Virginia Breeding Bird Atlas Blocks (5 records) View Map of All Query Results

Virginia Breeding Bird Atlas Blocks

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
57052	Bacons Castle, NE	2			Yes
57064	Hog Island, CE	56		II	Yes
57066	Hog Island, SE	64	ST	I	Yes
58051	Mulberry Island, NW	2			Yes
58063	Yorktown, CW	1			Yes

Public Holdings: (4 names)

Name	Agency	Level
Balthrope Marsh Wildlife Management Area	Va DGIF	
Hog Island Wildlife Management Area	Va DGIF	
Goose Island MR		Federal
Fort Eustis Military Reservation	U.S. Dept. of Army	Federal

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
093	Isle of Wight	421	FESE	I
095	James City	420	FESE	I
181	Surry	445	FESE	I
700	Newport News City	416	FESE	I

USGS 7.5' Quadrangles:
Bacons Castle
Hog Island
Mulberry Island
Yorktown

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
JL35	James River-Skiffes Creek	98	FESE	I
JL36	Lawnes Creek	85	FTSE	I
JL37	James River-Morrisons Creek	95	FESE	I
JL38	Warwick River	86	FTSE	I

Compiled on 11/18/2020, 11:50:34 AM V1062563.0 report=V searchType= R dist= 4828.032 poi= 37,07,51.6 -76,37,27.2

ATTACHMENT 3L
CULTURAL AND HISTORIC PRESERVATION SITES IN THE VICINITY OF JBLE-EUSTIS[89]

[89] 40 CFR Part 112 Appendix F 1.4.2

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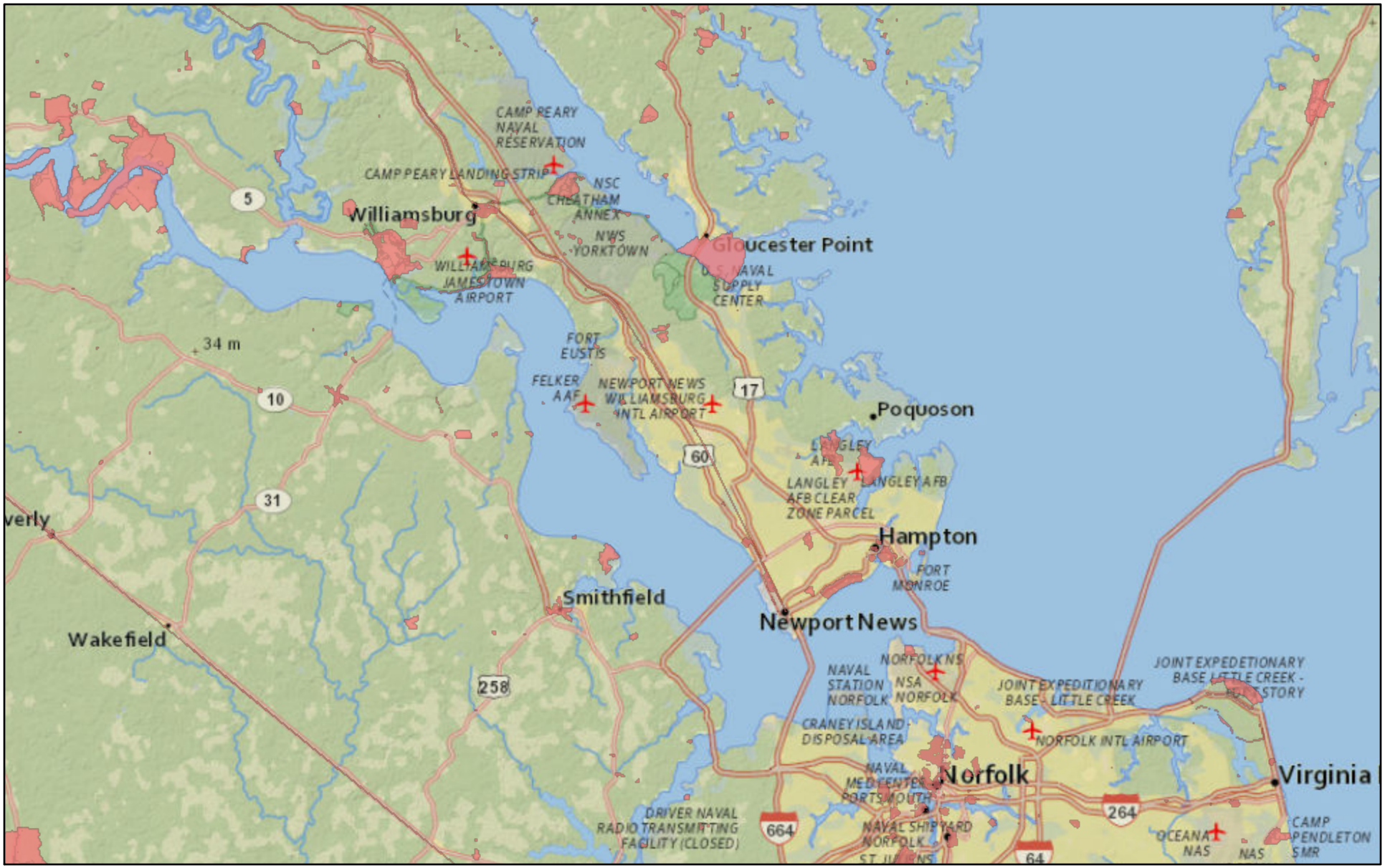
Cultural and Historic Preservation Sites in the Vicinity of JBLE-Eustis



November 18, 2020

Adjacent States

Cultural & Historic Preservation Category

1:549,504

0 3.75 7.5 15 mi

0 5 10 20 km

VDCR, VDOF, VDACS, National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P

Annex 4. Incident Documentation

The FES and/or the CEIE will conduct a post-incident investigation (i.e., hot wash, lessons learned) of the reportable petroleum spills/releases involving navigable waterways that occur at the installation. Once the FES and/or the CEIE members have responded to a spill event, the IC or alternate will supervise the containment and cleanup efforts. These responsibilities include the coordination of responding groups such as; spill response contractors, FES crews and rescue personnel. Appropriate follow-up actions must be performed after spill control/containment measures are completed, notification requirements have been performed, and cleanup procedures initiated or completed. These tasks will be completed by the IC and will include an accident investigation, response critique, plan review, and written follow- up reports.

4.1 Post-Incident Investigation[90]

The purpose of a post-incident investigation is to establish the cause of the incident and develop "lessons learned" to prevent future occurrences.

Following completion of spill response and cleanup activities, the QI and/or the designee will assemble information concerning the incident and will prepare and submit an After Action Report to the CEIE.

As soon as the spill area is stabilized (rendered safe), the QI will initiate the post-evaluation by completing the following:

- A description of the spill event,
- A record of the notifications to regulatory agencies,
- A chronological record of events and containment actions,
- Copies of the reports and correspondence with regulatory agencies,
- An analysis of the causes of the spill event, including a failure analysis of the system or subsystem in which the failure occurred,
- A description of the corrective actions and/or countermeasures taken, including a description of equipment repairs or replacements,
- A description of additional preventive measures taken or contemplated to minimize the possibility of recurrence, and
- A recommendation for the amendment of this ICP or information necessary to support a determination that amendment is not required.

This written report will be completed within 60 days of the incident and is required to verify that the recommended corrective action is documented and implemented. CEIE is responsible for preparing written follow-up notification to the USEPA Regional Administrator within 60 days of an incident.

Additionally, the CEIE is responsible for submitting written follow-up documentation to the VDEQ if requested and required. Documentation may include a synopsis of the incident to include causes, response, cleanup actions, descriptions of injuries, and identification of death or injury to wildlife due to the spill/substance release. It may also involve an update to this Plan.

[90] 40 CFR Part 112 Appendix F 1.7; 33 CFR §154.1035(d)

4.2 Incident History[91]

The history of spills at JBLE-Eustis is maintained by CEIE. These files contain pertinent information including a spill report, documentation of notification requirements, Military Police blotter reports, FES incident logs, and copies of written follow-up reports. A list of the reportable spill history at JBLE-Eustis is presented in the table below.

Table A4-1. Spill History

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
05 January 2006, Diesel Fuel: Soldiers on board the vessel Hobkirk (LCU 2023) were transferring fuel into the day tank onboard when the Tank Level Indictor (TLI) gauge malfunctioned resulting in an overflow into the catch basin. The catch basin overfilled releasing approximately 60 gallons of diesel fuel onto the deck and into Skiffes Creek.	Upon discovery, the transfer operation was immediately halted. Containment boom was immediately deployed around the vessel and entire pier in order to prevent any product from reaching the James River. Crew members used sorbent pads to remove diesel fuel from the deck and water surrounding the vessel. The spill response contractor IMS was called in on Friday, 06 January to finish the cleanup process. Upon completion of cleanup, containment boom was left in place throughout the weekend.	In order to prevent such occurrences in the future, standard operating procedures have been modified to post additional watches at strategic locations during fuel transfer operations. Additionally, no fuel transfers will be permitted after daylight hours.
18 October 2006, Hydraulic Oil: At approximately 4:30 pm, personnel on board a Side Loading Warping Tug (SLWT 29) that was docked at Third Port noticed that the accumulator pressure gauge associated with the deck mounted winch had failed causing approximately 4 gallons of hydraulic oil to be released onto the deck of the vessel and into Skiffes Creek.	Containment boom, sorbent boom, and pads were deployed and successfully absorbed the sheen. Prevention of future releases such as this include increased funding to design, build and install secondary containment under deck mounted winches on similar vessels.	This particular vessel is being taken out of commission and will be cut up for scrap metal and will no longer be a threat to the environment.
14 November 2006, Hydraulic Oil: At approximately 10:15 am, personnel onboard Warping Tug 04 were performing routine maintenance operations when a pressure gauge malfunctioned and released approximately half a cup of hydraulic oil into Skiffes Creek.	Personnel responded immediately, deployed containment boom around the vessel and used sorbent pads to remove the product from the water.	The gauge is currently being repaired and supplies have been ordered for construction of secondary containment around the equipment to prevent similar occurrences in the future.

[91] 40 CFR Part 112 Appendix F 1.4.3, 1.4.4

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
04 January 2007, Sewage: At approximately 8:00 am a clogged sanitary line caused sewage to back up into a manhole, flow onto the ground, into the storm drain and into a nearby drainage ditch which, during strong rain events, empties into Eustis Lake. The total estimated amount of released sewage was approximately 100 gallons with approximately 75 gallons entering a storm drain.	Emergency responders built up a dike around the storm drain in order to stop additional sewage from entering the drain. Personnel unclogged the sewage line to allow proper flow to the lift station. Because there was no flow into the drainage ditch, the sewage was confined to an area of drainage ditch approximately 50 feet long by 5 feet wide which was approximately 8 inches deep with standing water. No sewage was noted in Eustis Lake. The grass and roadway surrounding the storm drain and contaminated water in the ditch were neutralized using lime and a chlorine solution.	No further action.
28 February 2007, Sewage: At approximately 1:50 pm, on February 28, 2007, a clogged sanitary line caused sewage to back up into a manhole, flow onto the ground and street. The total estimated amount of released sewage was approximately 100 gallons.	Emergency responders acted quickly to build a dam to prevent the sewage from reaching nearby storm drains. Personnel unclogged the sewage line to allow proper flow to the lift station. A vacuum truck was used to remove the standing liquid and the contaminated grass, sidewalk and roadway were neutralized using lime.	No further action.
03 May 2007, #2 Fuel Oil: At approximately 8:25 am, on May 3, 2007, approximately 388 gallons of #2 fuel oil overflowed from two 4,000 gallon aboveground storage tanks. The overflow occurred shortly after the tanks had been filled. Temperatures reached into the low 90's causing the tank and fuel to expand and overflow through the fill port and into the surrounding containment berm. The fuel oil was contained within the berm. No sign of fuel oil was noted on the ground surrounding the containment berm.	Emergency responders used a vacuum truck to remove the fuel oil from the berm and then used sorbent pads to clean up the residual fuel in the floor of the berm.	In order to prevent similar incidents in the future, the fuel oil contractor has been instructed to fill the tanks to only 90% capacity to allow for expansion during warm weather.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
18 May 2007, Diesel Fuel: At approximately 9:45 am, on May 18, 2007, while performing daily inspections, utilities personnel noticed the smell of diesel fuel coming from the sanitary system wet well inside of building 410. Upon investigation, they discovered approximately 2 cups of diesel fuel had been released into the sanitary system resulting in a light sheen on the wastewater in the wet well. They were, however, unable to uncover the origin of the fuel.	Emergency responders immediately shut down the pumps and contained the diesel fuel in the wet well and adjacent man way access. The fuel was vacuumed out and disposed of through proper procedures. No diesel fuel was noted in any of the man ways further down the line.	No further Action.
07 June 2007, Sewage: At approximately 08:10 am, on June 7, 2007, approximately a half gallon of sewage from sanitary lines flowed into a storm drain next to building 819. This occurred as a result of excessive amounts of paper products being deposited down the drain causing the sanitary line to clog. The clog resulted in a backup and subsequent release of sewage onto the surrounding ground and into the storm drain.	Emergency responders flushed the sanitary line to release the clog, cleaned and neutralized the affected ground area. A vacuum truck was used to clean out the storm drain.	In an effort to prevent such incidents from recurring, personnel have been instructed to refrain from depositing excessive amounts of paper products down the sanitary system.
16 September 2007, Motor Oil: At approximately 8:00 am, on September 16, 2007, a driver lost control of her vehicle in the 25 mph zone of Washington Blvd at the intersection of Williamson Loop. She drove off of the road into the adjacent ditch. In the process, she drove over a fire hydrant knocking it over and damaging the vehicle's oil pan. Approximately 2 quarts of motor oil were released from the pan and approximately 1 quart entered a nearby storm drain.	Emergency responders immediately blocked the storm drain with absorbent boom and a drain cover to prevent any additional oil from entering it.	No Further Action.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
20 September 2007, Sewage: At approximately 3 am, on September 20, 2007, approximately 100 - 150 gallons of sewage was released adjacent to 1930 Williford Street. During the night, technicians discovered a blockage in the gravity line and used a Sewer Jet to flush it out. However, when they flushed the line, the water and sewage backed up into a manhole and then overflowed onto the street. None of the sewage reached the storm drains or any water source.	The crew immediately shut down the Sewer Jet and began emergency response procedures. They vacuumed up the sewage from the street and neutralized the affected area by applying lime.	No Further Action.
27 September 2007, JP-8 Aircraft Fuel: At approximately 7 am, on 27 September 2007, personnel discovered approximately 35 gallons of JP-8 had leaked under a Chinook helicopter (number 00240). The crew had refueled the helicopter the previous evening, but failed to secure one of the valves upon completion. Most of the fuel was contained to the hardstand with a minimal amount spilling over onto a small area of soil adjacent to the air strip. No fuel entered the storm drain or any waterway.	Emergency responders used absorbent socks and oil-dri to contain and clean up the fuel from the hardstand. The contaminated soil was removed and has been scheduled for pick up and treatment by Soilex.	The squadron is currently reviewing and revising refueling procedures to avoid such incidents in the future.
07 November 2007, Sewage: At approximately 12:00 pm, on November 07, 2007, personnel discovered sewage being released into a ditch near 515 Sternberg. It was the result of a sanitary line that was cross connected with a stormwater line. Tracer dye was used to determine the source and to estimate the rate of the flow. It was estimated at one gallon per minute with a high end total estimate of approximately 1440 gallons released into the storm drain.	Emergency responders immediately built a sand dam and as an extra precaution placed hay bales in the ditch to prevent sewage from entering the Warwick River. No sewage was noted beyond the sand dam. The sewage was pooled in one section of the ditch. At least one half to three quarters of the sewage was captured and pumped into the sanitary system for disposal. The area and stormwater lines were flushed with potable water.	To prevent similar situations from happening in the future, the system is being rehabilitated.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
6 December 2007, Sewage: At approximately 1730 hours, on December 6, 2007, Fort Eustis Fire and Emergency Services received notification of a release of approximately 150 gallons of raw sewage onto the ground with an estimated 100 gallons going into a storm drain near building 1164 on Jackson Ave. Release was due to clogged sewer line causing a backup and subsequent overflow. The sewage spill entered a storm drain between Jackson Ave. and Patton Ave.	An earthen dam was immediately built to prevent additional sewage from entering the storm drain. The drain and ditch were vacuumed out then lime was applied to the area to neutralize it.	Regular sanitary line maintenance is currently being performed.
4 January 2008, Sewage: At approximately 1417 hours on January 4, 2008, Fort Eustis Fire and Emergency Services received notification of a sewage overflow from a manhole at Van Voorhis St. and Cole St. An estimated 50 gallons of raw sewage overflowed the manhole, with approximately20 gallons entering a nearby drainage ditch, running down gradient to a storm water catch basin approximately 30 yards away near the corner of Wilson Ave. and Cole St.	Maintenance personnel vacuumed the sewage from the manhole, the ditch and the storm drain. A clogged sewer line caused the overflow. The line was unclogged and the affected area was neutralized with lime.	No further Action
26 June 2008, Sewage: At approximately 1744 hours, on June 26, 2008, a blocked line caused sewage to backup into personnel housing at 1934 Wilford Street. Before a vacuum truck could pump out enough sewage to find the blockage, approximately 150 gallons of raw sewage overflowed into the street and down nearby storm drains.	Fort Eustis Fire and Emergency Services responded to the spill and immediately started clean up procedures. An inspection of the storm sewer system catch basins determined that the sewage stayed in the two block housing area and did not reach any outfalls. The lines were vacuumed out, the blockage removed, and lime was put on the affected area.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
8 December 2008, Oily Water: At approximately 1530 hours, on December 8, 2008, a PVC clean out cap in the suction line that runs from the pier to the oil water treatment plant, failed allowing a small amount of oil to leak out, filling the manhole and overflowing onto the concrete. Upon discovery Old Dominion Utility Services (ODUS) personnel began to remove the cap to determine the cause of the leak. The threads hole in the cap in place on the suction line were corroded and allowed the cap to blow off while being unscrewed, resulting in approximately 75 gallons of oily water (containing approximately 5% oil) being released very rapidly. The oily water ran into a storm water drain approximately 50 feet before Advanced Federal Services Corporation personnel could cover the storm drain or stop the flow. Oily water entered the storm drain as ODUS personnel worked to plug the cleanout and stop the flow. This resulted in approximately three gallons of oily water entering Skiffes creek.	Fort Eustis Fire and Emergency Services responded to the spill and immediately started clean up procedures and placed containment boom around the product in Skiffes Creek. An area approximately 20 feet by 100 feet was boomed to contain the oil. No oil could be recovered due to the small amount discharged. The boom was left in place until the leaking cap was permanently secured and has been removed and properly disposed. The storm water catch basins and the connecting lines were cleaned out by vac truck. The line has been pressure tested, flushed and cleaned with a vac truck and is functioning properly.	No Further Action
13 January 2009, Diesel Fuel: At approximately 12:25 pm, on January 13, 2009, approximately one cup of marine diesel fuel was released into Skiffes Creek as a result of fuel transfer operations between vessels. As the Soldiers finished the transfer, shut off the pressure and disconnected the fuel line, a small amount of fuel sprayed out of the end of the fuel line and onto the deck and into the creek.	Cleanup was completed using oil absorbent pads to remove the sheen.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
12 February 2009, AFFF: At approximately 10:45 am, on February 12, 2009, approximately 75 gallons of AFFF mixed with water was released onto the parking lot between Building 2716 and a wooded area. Fort Eustis Fire and Emergency Services personnel were fighting a brush fire with water from a fire truck. There was a malfunction in the foam system causing foam to be piped into the pumping system (all foam valves were closed), the operator was re-circulating the water through the tank (common practice) which contaminated the tank. Upon establishing a water supply and the operator filling the tank, it mixed causing the foam to bubble out the top of the tank.	Upon noticing foam coming out the top the operator closed the tank fill. None of the foam mixture reached any storm water drainage.	No Further Action
1 June 2009, Gasoline: At approximately 14:45 pm, on June 1, 2009, a worker from a landscaping contractor, Tanner Enterprises, was refueling a riding lawnmower with a plastic 5 gallon gasoline container. The gasoline ignited and the resulting fire engulfed two riding lawnmowers parked on Summerville Road. Fort Eustis Fire and Emergency services responded and put out the fires, and in doing so, approximately 10 gallons of gasoline with water was washed into a nearby storm drain. The release did not travel any further than the catch basin of the storm drain.	A vac truck was called in and the water and gasoline was removed from the catch basin. A local tow truck company was called in to remove the remainder of the lawnmowers, with absorbent socks placed beneath them on the truck bed to absorb any fluids that may leak during transport. The area where the lawnmowers were sitting at the time of the fire was cleaned with clay absorbent and the material has been containerized for proper disposal.	No Further Action
15 July 2009, Bilge Water: At approximately 11:45 am, on July 15, 2009, personnel aboard a vessel (ST-913) that was docked at Pier 1 noticed bilge water flowing onto the deck of the vessel. Upon investigation, it was discovered that the operator was pumping bilge alone and with no one monitoring the product level. As soon as he was notified of the overflow, the operator shut down the pump. Approximately 10 gallons of bilge water flowed overboard into Skiffes Creek.	First responders immediately deployed containment boom to prevent contamination from spreading beyond the area adjacent to the vessel and removed the containment using sorbent pads.	Personnel are receiving retraining on proper SOPs.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
July 17, 2009, Sewage: At approximately 9:00 am, on July 17, 2009, sewage overflowed from a sanitary man way onto the road at the intersection of Benedict Place and Monroe Avenue. Approximately 10 gallons were released onto the road with an estimated one gallon entering a nearby storm drain.	Emergency responders dammed the area around the storm drain to prevent additional sewage from entering. The small amount of sewage did not go beyond the drain.	No Further Action
22 June 2010, Sewage: At approximately 1400, on June 22, 2010, a sewage leak in a lateral sewer line was discovered by a plumbing contractor while investigating a sewage smell on the clinic's second floor. The contractor traced the odor to the crawl space under building 576, MAHC, and found an area approximately 12 feet by 20 feet of raw sewage contaminated soil. An estimated 100 gallons of raw sewage had leaked into the soil at the time of discovery. The sewage did not go beyond the crawl space under MAHC.	The line has been dug up and repaired. A clean-up contractor is currently being hired to remove the contaminated soil, place lime in the affected area, and replace the removed soil with clean fill.	No Further Action
June 30, 2010, Bilge Water: At approximately 1430 hours, on June 30, 2010, personnel aboard the vessel General Frank S. Besson Jr. (LSV-1) were conducting bilge discharge operations. A crew member disconnected a hose spilling approximately one gallon of bilge water onto crew members and the pier, as well as discharging less than 1/2 gallon into Skiffes Creek.	Immediately upon notification of the overflow operators shut down the pump and initiated spill response measures. The vessel was already surrounded by containment boom, and first responders immediately deployed sorbent pads to prevent Contamination from spreading beyond the area adjacent to the vessel as well as to remove any contaminant residue.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
28 September 2010, JP-8: At approximately 1455 hrs, on September 28, 2010, airfield personnel were performing fuel receiving operations for the 30,000 gallon above ground storage tanks at Felker Army Airfield. The operator was receiving fuel when JP-8 was observed flowing from the top of tank 1. The resulting spill totaled approximately 1,582 gallons, with approximately 1,370 gallons recovered from the secondary containment, and 212 gallons being discharged onto the ground.	Receiving operations were halted immediately, and spill response was initiated. Sorbents were placed at the outfall of the secondary containment drain, and contracting support was obtained for the removal of fuel from the secondary containment, and soil disposal. The spill was a result of an unexplained valve failure which allowed fuel to be siphoned from one tank to another during receiving operations as well as a damaged over fill alarm which had been noted by the operator but not repaired by the responsible agency. All contaminated soil and sorbents have been removed and transported for disposal, and processes will be put into place to ensure the containment valve will remain closed during refueling operations.	The vale was replaced and the overfill alarm was repaired. The operator was also instructed on the proper notification requirements for damaged systems on storage tanks.
29 September 2010, Diesel: At approximately 1100 hrs, on September 29, 2010, personnel employed by RIVRON – 1 and Domestic Fuels were performing refueling operations on a tank barge. The operator was transferring fuel when the flow of diesel produced a "burp" causing approximately ten gallons of fuel to discharge from the storage tank. Of the 10 gallons, 7 gallons were contained in secondary containment, and 3 gallons were discharged into the waters of Skiffes creek.	According to standard operating procedures, containment boom was placed around the barge before fueling operations began, and spill response was implemented immediately upon occurrence of the spill. First responders deployed sorbent pads and spill boom to prevent contamination from spreading beyond the area adjacent to the barge as well as to remove any contaminant residue. Contractors were obtained to complete the remediation process. Employees will be instructed to transfer fuel at a slower rate to avoid the possibility of a "burp" reoccurring.	No further Action
21 October 2010, Sewage: The Environmental Office was notified at approximately 5pm on Thursday, October 21 of a potential sewage overflow adjacent to Eustis Lake. It has been determined that on September 30, 2010, the Hampton Roads Sanitation District (HRSD) lift station high level alarms had sounded and HRSD personnel responded to an overflow at the manway next to the lift station. At that time, two manways apparently overflowed during heavy rains.	HRSD personnel cleaned and limed the area around the lift station, but did not realize the second manway had also become overwhelmed and subsequently overflowed onto the surrounding ground and into the lake. The total amount released and/or that entered the lake has not been determined as there is no way to make that determination at this point. However, the area has been cleaned and limed.	Since the discovery of this incident, communication between the Installation and HRSD has emphasized the importance of notifying Installation personnel of high level alarms as well as any overflows at the lift station.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
27 October 2010, Bilge Water: At approximately 1430 hrs, on 27 October 2010, military personnel were performing maintenance on an engine compartment located aboard a US Army vessel at Third Port Operations facility on Fort Eustis, Virginia. The crew used a Wet/Dry Vacuum to remove approximately 1.5 gallons of bilge water from the compartment and had placed the vacuum on the deck, where another member of the crew stumbled and stepped on the bottom plug of the vacuum causing it to break. The fluid contained inside the vacuum leaked onto the deck, which resulted in approximately one gallon of bilge water being discharged into Skiffes creek.	Spill response was immediately implemented upon occurrence of the spill. First responders deployed sorbent pads and spill boom to prevent contamination from spreading beyond the area adjacent to the vessel as well as to remove any contaminant residue.	Personnel will be instructed to ensure all containers, including wet/dry vacuums are placed in secondary containment when they contain liquids, and to secure any trip hazards during operations, not only to ensure the safety of the crew, but to prevent damage to the environment as well.
11 January 2011, Diesel: At approximately 1205 hrs, on January 2011, military personnel were performing unauthorized refueling operations aboard vessel MWT 03. Military personnel were transferring fuel from a winch into a 5 gallon bucket which was then to be used to fill a space heater on board. While the transfer was taking place the container was left unattended for approximately 5 minutes. When the crew returned they noticed the container over flowing and leaking down the side of the vessel into Skiffes Creek.	The crew notified the Fort Eustis Fire Department as well as Port Operations and Fort Eustis Environmental. Containment boom was immediately placed around the vessel, and sorbents were utilized to clean up the release. It was determined that approximately three (3) gallons of JP-8 was released into the creek which was removed by "oil only" absorbents. The containment boom will remain in place for the next several days and personnel will conduct daily inspections and cleanup activities to ensure all contaminate has been removed from the affected area.	Personnel will be reminded that no unauthorized refuel practices are allowed on the vessel, and that all containers of fluid are required to have secondary containment at all times.
12 January 2011, Sewage: At approximately 0800 hours on 12 January 2011 employees of Old Dominion Utility Services (ODUS) were conducting maintenance operations on a sewer line when a blocked line caused approximately 30 gallons of sewage and water to flow back out of the line.	The operation was stopped immediately, storm drains were protected, and the Fort Eustis Fire Department and Environmental Office were notified. A vacuum truck was utilized to clean up the spill as well as to purge the blocked line, and Lime was placed over the affected area to neutralize any contamination.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
10 February 2011, Diesel: At approximately 1500 hours, on 10 February 2011, military personnel engaged in maintenance on the engine of a US Army Mike Boat. Due to the repeated failed attempts to ignite the engine, raw fuel had gathered in the combustion chamber and exhaust system. Upon ignition, approximately one (1) gallon of JP-8 was discharged through the exhaust and into Skiffes Creek.	The crew notified the Fort Eustis Fire Department, Port Operations and Fort Eustis Environmental. Containment boom was immediately placed around the vessel, and sorbents were utilized to clean up the release. The containment boom remained in place over night at which point personnel conducted final clean up and inspection activities to ensure all contamination had been removed from the affected area.	No Further Action
11 August 2011, JP-8: At approximately 1050 hours, on 11 August 2011, military personnel were engaged in the transfer of fuel from one vessel to another. During the transfer an apparent air bubble in the fuel line caused a "burp", discharging approximately one quart onto the vessel deck, with approximately one pint being discharged into Skiffes Creek.	According to SOP, containment boom was placed around the vessels before fuel transfer operations were initiated. The crew immediately notified the JBLE - Eustis Fire Department, Port Operations and JBLE – Eustis Environmental. Personnel utilized sorbents to contain and clean up the release.	No Further Action
31 August 2011, Milk: At approximately 0900 hours, on 31 August 2011, the Fort Eustis Environmental Office was notified of an unidentified, foul smelling discharge in the storm drainage ditch behind building 2754. After arriving at the scene, the Environmental Office requested First Responder services from the Fort Eustis Fire Department, who then proceeded to damn the ditch and place absorbent booms. Upon investigation the identity and source of the discharge still remained undetermined, and the Environmental Office activated the SPCC plan, requesting contractor support. At approximately 1630 on 31 August 2011 it became apparent that the source of the spill was an unauthorized discharge of an unknown quantity of spoiled milk to the storm drain from the commissary.	Due to contracting issues, remediation began on 2 September 2011, and was completed on 3 September 2011. Clean up consisted of washing and pumping of the drainage ditch and associated storm drains, as well as small amounts of soil removal, and the removal of all sheens associated with the discharge with absorbent pads.	Commissary personnel were instructed on the proper disposal of materials and the commissary was charged with the cost of cleanup.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
15 November 2011, Bilge Water: At approximately 1440 hours, on 15 November 2011, soldiers of the 73'd Transportation Company were discharging bilge water from the vessel "MG Winfield Scott". After completion of the process the supervisor began the uncoupling process by slowly relieving pressure from the lines. The supervisor thought that he had completed the process and disconnected the lines. There was still residual pressure in the lines, and as a result there was a discharge of approximately 5 gallons of bilge water onto the dock, and approximately 1 gallon into Skiffes creek.	According to Standard Operating Procedures, the vessel had already been surrounded by containment boom to contain any accidental spills. Fort Eustis Fire and Emergency services was notified immediately, and the vessels crew began placing sorbents to contain and remediate the spill. The discharge was cleaned up, and new sorbents were placed around the vessel to remain overnight to facilitate the capture of any remaining residue. Spill remediation was completed at approximately 1100 hours on 16 November 2011.	No Further Action
06 December 2011, Bilge Water: At approximately 0800 hours, on 06 December 2011, sailors of RIVRON 3 were conducting pre-operations checks when they discharged approximately 10 gallons of bilge water, which had become contaminated with diesel fuel during maintenance operations from one of the river patrol boats. Port Operations personnel noticed the discharge and immediately stopped operations, notified the Fort Eustis Fire Department, and began placing containment boom in place.	First responders and sailors began placing absorbent pads, and booms to contain and begin cleanup of the spill. Upon arrival of the Environmental Staff it was determined that additional support may be necessary, and the Installations OSRO was notified. HEPACO responded, conducted a shore line survey, and used absorbents and dip nets to remove the remaining oil, and oil contaminated debris. Spill remediation was completed at approximately 1330 hours on 06 December 2011.	Navy Personnel have been instructed that they are not allowed to discharge bilge water at Fort Eustis.
15 December 2011, Sewage: At approximately 1100 hours, on 15 December 2011, the Fort Eustis Environmental office was notified of a sewage spill near building 829 Monroe Ave by Old Dominion Utilities Services (ODUS). The discharge had been discovered by a plumbing contractor who then notified ODUS of the release. An apparent clogged line had caused a backup, discharging approximately 200 gallons of sewage into the storm drain system. The extent of the contamination extended the length of the storm drain and to an outfall which leads to Eustis Lake.	The outfall was blocked with soil to prevent the contamination from spreading. ODUS cleared the blockage, cleaned and vacuumed the storm drain, and remediated any contaminated soil with lime. Clean up was completed at approximately 10:30 pm on 15 December 2011.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
9 January 2012, 80/90 Weight Oil: At approximately 1245 hours, on 9 January 2012, US Army Divers from Fort Eustis Virginia were conducting external inspections of the hull of the MG Winfield Scott, a LT 805 tug boat. During the inspection the divers observed oil in an open compartment underneath the tug which surrounds the bow thruster. Upon further investigation it was discovered that a faulty seal in the bow thruster had leaked, causing oil to accumulate in the bow thruster tube. The activity of the divers, and passing boats, caused the oil in the bow thruster tube to disperse and rise to the surface, releasing an estimated seven gallons of 80/90 weight oil into Skiffes creek.	First responders captured and contained the release with boom, and absorbents which will remain in place to capture any residual oil until the boat is transferred to dry dock for maintenance. Maintenance crews have also removed oil from the bow thruster holding tank, and will seal the bow thruster tube to ensure there is no possibility of continued leakage.	No Further Action
13 March 2012, Hydraulic Fluid: At approximately 0930 hours, on 13 March 2012, a hydraulic winch, located on board the US Anny vessel Aldie, began leaking. Before activity personnel could completely contain the spill on the vessel, rain had washed approximately 1 pint overboard into Skiffes creek.	Absorbents were utilized to clean up the remaining fluid on board, as well as to remove any hydraulic fluid from Skiffes creek.	No Further Action
6 June 2012, Diesel: At approximately 1200 hours, on 6 June 2012, soldiers of the 331st Transportation Company noticed the smell of fuel and a faint sheen while conducting routine maintenance. Upon further investigation it was discovered that a catch basin located under the vessels winch had overflowed due to a recent rain event, and discharged approximately one gallon of residual fuel into Skiffes Creek.	The crew notified first responders and Port Operations and then began placing absorbent pads into the water. When authorities arrived the vessel was boomed off, and absorbents were utilized to remove any remaining fuel from Skiffes Creek.	Boat crews will be reminded of the importance of checking and draining their catch basins at the end of the day, and after rain events.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
18 August 2012, Diesel: At approximately 1045 hours, on 18 August 2012, soldiers of the 97th Transportation Company were conducting an internal fuel transfer aboard LCU-2005 in preparation for departure when the ships watch discovered diesel fuel being discharged overboard into Skiffes creek. During the investigation it was discovered that both a magnetic fill gauge and a float valve had failed, allowing the discharge to occur and resulting in the release of approximately 5 gallons of diesel fuel into Skiffes Creek.	Transfer operations were ceased immediately, the Fort Eustis Fire Department and Port Operations were notified, and the crew began utilizing absorbent pads and boom to contain the spill. When responders arrived they placed containment boom around the vessel to capture and contain the spill, and then began cleanup operations.	The use of SOPs prevented this release from being far worse, however the crew will be reminded of the importance of proper preventative maintenance, which could have identified the equipment deficiencies, thus preventing the discharge all together.
10 October 2012, JP-8: At approximately 1157 hours, on 10 October 2012, soldiers aboard LCM 8542, a US Army vessel, were transferring fuel from their vessel to LCU 2011 in preparation for departure when a small "burp" occurred causing approximately one cup of diesel fuel to be discharged into Skiffes creek.	Prior to the commencement of transfer operations containment boom was placed around the vessels in accordance with JBLE-E standard operating procedures. After the discharge, transfer operations were ceased immediately, and Fort Eustis Fire Department and Port Operations were notified, and the crew began utilizing absorbent pads to contain and clean up the spill.	The cause of the "burp" remains undetermined, and the use of SOPs prevented this release from being far worse, however the crew has been instructed to utilize a slower rate of transfer to reduce the risk of reoccurrence.
22 April 2013, Unknown Material: At approximately 1420 hours, on 22 April 2013, personnel from Port Operations discovered an unusual sheen from an unknown source (possibly from excess fuel in an engine manifold on startup, or from the operation of outboard boat engines) on the water in Skiffes Creek.	The personnel began initializing spill response by placing spill boom around the sheen to contain it and notified Fort Eustis Fire and Emergency Services. First Responders utilized absorbent material to remove the sheen.	No Further Action
1 May 2013, Bilge Water: At approximately 0740 hours, on 1 May 2013, Navy personnel from CRS3 assigned to Yorktown Naval Weapons Station, were moving Boat #RAB804 from pier 15 of the Third Port facilities at Fort Eustis when approximately 2 cups of bilge water containing an excess amount of oil leaking from a damaged oil cooler hose was accidentally discharged into Skiffes creek.	Navy personnel did not report the discharge to Fort Eustis until approximately 0905 hours at which time Fort Eustis Fire and Emergency Services was notified. First Responders utilized absorbent material in an effort to remediate the spill, however due to the delayed notification and adverse weather conditions, what little oil that had been discharged was already dissipated, causing the absorbents to be ineffective.	To prevent future occurrences, the unit was reminded of the proper reporting procedures for spill response and of the proper procedures for the handling of bilge water while conducting operations on Fort Eustis. They were also reminded of the consequences of failing to comply with these procedures.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
4 May 2013, Paint: At approximately 1800 hours, on 4 May 2013, Trainees assigned to the 128th Aviation Brigade were painting their barracks. When the painting operations were complete, they washed their paint brushes and rollers with a mixture of paint thinner and water from an outside faucet. While washing their equipment the personnel failed to containerize their waste, and instead, they discharged their waste onto the ground. The residue from these washing activities traveled along a sidewalk to a curb and then down a storm drain. The personnel failed to notify Fort Eustis of the discharge, and it was not discovered until 7 May 2013 when the Fire Department discovered the stained soil and concrete while responding to a trouble alarm.	The Fire Department notified the Environmental Office and remediation efforts were begun. The contaminated soil was removed, the stained concrete was washed, and all impacted storm drains were washed and cleaned with a Vac truck.	The Unit Command received a reprimand and were reminded of the consequences of improper disposal of paint residue.
7 September 2013, Sewage: At approximately 1000 hours, on 7 September 2013, raw sewage was discovered flowing from two manhole covers and entering the storm drain system near building 1004 by personnel investigating a report of a sewage backing up in the building.	Personnel immediately notified Fire and Emergency Services who responded and secured the scene. Fire and Emergency Services notified Old Dominion Utility Services (ODUS) and the installation's spill program manager, who then responded to the emergency. ODUS responded, secured the release, and utilized a vac truck to clean the impacted storm drain system, the roadway, as well as cleaning and removal of the blockage in the wastewater system which had caused the release. Lime was utilized to ensure neutralization of any residual contamination.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
22 February 2014 Sewage: At approximately 1100 hours, on 22 February 2014, raw sewage was discovered flowing from the sewer clean out on the east side of building 1001. No sewage entered any storm drain system, however it is estimated that 1000 gallons of raw sewage was released to the surrounding area. Most of the sewage flowed into an open field between B1001 and B1002 that is used for physical training by barracks personnel.	ODUS responded, secured the release, and determined that due to the location and soil conditions, using a vac truck to clean the impacted area was not possible. A decision to spread lime over the entire area and restrict personnel from using the affected area for the next 7 days was made. The cause of the release appeared to be a missing cap from the sewer clean which most likely was not secured properly and "blew" off when a blockage in the wastewater system occurred and pressure in the line occurred.	No Further Action
8 March 2014, Sewage: At approximately 1620 hours, on 08 March 2014, raw sewage was discovered flowing from a manhole near B2936, residential housing, on Summerall Circle. No sewage entered any storm drain system, however it is estimated that 50 gallons of raw sewage was released to the surrounding grassy area.	Fire and Emergency Services notified Old Dominion Utility Services (ODUS) and the Installation's spill program manager, who then responded to the emergency. ODUS responded, secured the release, and determined that there was a blocked sewer line. The line was cleared, camera sent thru to confirm blockage was released and area cleaned up.	Residents were reminded of what can be properly discharged into the sanitary system.
19 March 2014, JP-8: At approximately 1500 hours, on 19 March 2014, a fuel spill occurred from an internal fueling operation aboard a LCU at Third Port. Approximately 265 gallons was released into Skiffes Creek. The spill was reported to the Port Harbor Master, who in turn notified, Fire and Emergency Services who responded and secured the scene.	Unit personnel, under the direction of the Harbor Master and CED/EE responded and cleaned up the spill. Due to the size of the spill, the USCG conducted a site visit on 20 Apr 14 and were pleased with the response and cleanup efforts.	The spill resulted from personnel not following established procedures and the Command is currently resolving this situation to prevent future occurrences. All recovered materials will be disposed in accordance with (IAW) established procedures.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
23 August 2014, Sewage: At approximately 1930 hours, on 23 August 2014, raw sewage was discovered flowing from the sewer clean out adjacent to Building 810. Approximately 500 gallons were released to the surrounding area with 100 to 200 gallons entering a nearby storm drain.	Fire and Emergency Services responded and secured the scene until Old Dominion Utility Services (ODUS) and the Civil Engineer Division, Environmental Element (CED/EE) responded to the emergency. ODUS determined that due to the location and soil conditions, using a vac truck to clean the impacted area was not feasible. It was decided to spread lime over the entire area and restrict personnel from using the affected area. The storm drains on either of the drain where the sewage entered the system were dry, making full recovery possible. After recovery it was verified by CED/EE that none of the discharged sewage could reach an outfall. The cause of the release appeared to be a missing cap from the sewer cleanout which most likely was not secured properly.	No Further Action
16 January 2015, Sewage: At approximately 1830 hours on 16 January 2015 raw sewage was discovered flowing from a manhole near Building 305, residential housing, on 28th Street. An estimated 100 gallons of sewage was released into the storm drain system.	Fire and Emergency Services notified Old Dominion Utility Services (ODUS) and the Installation's spill program manager, who then responded to the emergency. Crews from ODUS secured the release, cleared the blockage, pumped and cleaned the storm sewer line and utilized lime to neutralize the remaining affected area.	Residents were reminded of what can be properly discharged into the sanitary system.
25 February 2015, Sewage: At approximately 10:50 am, Old Dominion Utility Services was conducting transfer operations from US Army watercraft to their wastewater treatment plant. During a brief change over, the line became frozen (possibly the result of faulty heat tape) and then burst, resulting in the release of raw sewage into Skiffes Creek.	Operations were immediately suspended; however, remediation was not possible in this particular situation.	The line has been repaired and the heat tape is being investigated for failure.
23 March 2015, JP-8: At approximately 10:15 am, soldiers from the 331st Transportation Company were completing a ship to ship fuel transfer. Due to an uncapped hose and pump, an estimated one quart of diesel fuel was released into Skiffes Creek.	In accordance with Installation Standard Operating Procedures, containment boom was put in place before the transfer operations began, thus minimizing any impact to the environment. The spill was remediated by the organization.	The Soldiers were retrained on the importance of following SOPs, and ensuring all caps are in place before ending operations.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
8 July 2015, Hydraulic Fluid: At approximately 0730 hours on July 8, 2015, hydraulic fluid was discovered leaking from a rough terrain fork lift. This fork lift was brought in for repair on July 7, 2015, and parked in the holding yard near Building 1411. An estimated 40 gallons of hydraulic fluid was released onto a gravel and soil surface.	Fire and Emergency Services responded and secured the scene. Fire and Emergency Services notified the Installation's spill program manager, who then responded to the emergency. Crews from Global Management Services, LLC secured the release and removed contaminated soil from the spill site and contracted Clearfield MMG, Inc. for disposal at the Chesapeake Facility.	No Further Action
27 October 2015, Unknown Oil: At approximately 1638 hours on October 27, 2015 oil was discovered seeping from a stormwater outfall. Upon discovery of the discharge by personnel in the area, the spill was reported to Fire and Emergency Services.	The Harbormaster had secured the area and deployed boom and pads by the time Fire and Emergency Services responded to the site. The source of the oil is unknown and is believed to have been trapped in the storm drain. It was probably dislodged due to the recent extra high tides. Booms and pads are still being used to capture the product.	A decision will be made to determine the best way to clean the storm drain to remove any remaining oil.
1 February 2016, Hydraulic Oil: At approximately 0815 on 1 February 2016 a spill occurred in the James River Reserve Fleet (JRRF) area. A Marine Unit (EOTG) was preparing their 30 foot vessel for departure when a power steering line failed causing a loss of approximately 1 pint of hydraulic fluid which entered the James River.	Personnel at the site deployed boom and used pads to capture the spilled materials. The spill was reported to Fire and Emergency Services and the Installation's on call Environmental Spill Manager was notified and responded to the emergency. The spill was cleaned up by 0930.	No Further Action
2 February 2016, Raw Sewage: On 2 February 2016 at approximately 1337 hours a sewage spill occurred adjacent to the Commissary (Building 1382).	Fire and Emergency Services and the Installation's on call Environmental Spill Manager were notified and responded to the emergency. Remediation efforts began immediately by Old Dominion Utility Services, and the National Response Center and Virginia Department of Environmental Quality were notified. Remediation was completed at approximately 1500 hours.	The Commissary Store Manager was notified and asked to inform their employees and patrons about not flushing inappropriate items.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
3 February 2016, Hydraulic Oil: On 3 February 2016 at approximately 1300 hours US Army vessel LT 805, the Winfield Scott, was conducting operations in the James River when a hydraulic fitting came loose causing a discharge of approximately 3 gallons of hydraulic fluid. It is estimated that 1 gallon of hydraulic fluid was released into the James River.	The crew ceased operations, secured the fitting, and returned to Fort Eustis Third Port where the vessel was boomed off and cleanup operations were begun. Fire and Emergency Services and the Installation's on call Environmental Spill Manager were notified and responded to the emergency. The vessel remained boomed over night to ensure that any residual fluid was captured. Spill remediation activities were concluded on 4 February 2016 and the vessel will be returned to service.	No Further Action
24 February 2016, Hydraulic Oil: On 24 February 2016 at approximately 0915 hours US Army vessel MWT 03, was preparing to conduct fueling operations when Port Operations Personnel noticed a sheen on the water. The personnel ceased operations, and began to investigate the origin of the sheen.	It was discovered that personnel from the vessel had performed maintenance and had failed to empty a drip pan containing a small amount of hydraulic fluid. Due to the weather, the drip pan had been allowed to become over full and spill onto the deck, and eventually into Skiffes Creek. Port and vessel personnel responded and began mitigating the spill using spill boom, absorbent socks and absorbent pads. The vessel will remain boomed over night to ensure that any residual fluid is captured.	Personnel were retrained on the importance of emptying drip pans before they become overfilled.
25 March 2016, Raw Sewage: On 25 March 2016 at approximately 0930 hours personnel from Old Dominion Utility Services (ODUS) responded to a call for a clogged sewage line. Upon arrival the crew discovered sewage flowing from a manhole located near building 3306. An estimated 300 gallons of sewage was released.	The crew stopped the flow, and cleaned the lines. The spill was confined to a concrete driveway and two grassy areas, and the crew remediated the spill by utilizing lime.	No Further Action
27 July 2016, Hydraulic Oil: Equipment failure, 1.25 gallons	No data	
15 August 2016, Hydraulic Oil: Equipment failure, 129 gallons	No data	
7 September 2016, Raw Sewage: 1500 gallons	No data	

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
10 February 2017, Paint/Raw Sewage: On 10 February 2017 at approximately 1715 crews from Balfour Beatty and Old Dominion Utility Services (ODUS) responded to a complaint of a sewage back up in housing near buildings 308 and 309 Madison Avenue. Upon arrival the crews opened the clean out cap to begin clearing the line. When the cap was removed the back pressure from the blockage caused approximately 100 gallons of raw sewage to be discharged onto the ground and then into a storm drain.	Fire and Emergency services were notified and responded to the spill and they in turn notified Environmental Staff. As the crews cleaned the lines it was discovered that there was latex paint in the lines and that the blockage appeared to be the result of the mixture of paint and industrial wipes and paper towels. The paint and industrial wipes are believed to be the result of a paint contractor operating in one of the housing units cleaning their equipment. ODUS personnel vacuumed up the standing liquid, utilized absorbents to collect and then utilized lime to neutralize any remaining sewage residue.	Balfour Betty management was notified of the incident and the belief that their contractors actions caused the back up. They will be addressing these issues directly with their contractor.
15 March 2017, Other Material: On 15 March 2017 at approximately 0745 hours a supervisor was completing a walkthrough of building 695 which is the 7th Sustainment Brigade "Resolute" Dining Facility, when she noticed a trail of cooking oil leading to a storm drain located next to the facility loading dock. She investigated and ascertained that at approximately 1800 the evening before (14 March 2017) a soldier had poured approximately 15 gallons of used cooking oil into the storm drain instead of the Used Cooking Oil containers located about 50 yards away.	The supervisor contacted a member of the Installations Facility Maintenance Contractor who notified Fire and Emergency Services and the Environmental office. Old Dominion Utility Services was contacted to jet and vacuum the line, and personnel from the Environmental office utilized absorbent pads to recover small pockets of cooking oil from the drainage ditch which leads to Fort Eustis Lake.	The responsible individual received non-judicial punishment for his actions and was retrained on procedures for the handling of used cooking oil.
22 May 2017, Oily Bilge Water: Storm event, 10 gallons At approximately 1500 on 22 May 2017, a spill occurred in the Wastewater Pretreatment Facility (WPTF) at Third Port. Due to heavy rain in a short period of time, water sheet flow overwhelmed a basin designed to contain small amounts oily material while being transferred to the WPTF.	Personnel at the site reported the spill and initiated clean up. Boom was deployed to prevent the materials from leaving Skiffes Creek. Recovery of materials from the water was not possible. Absorbents were used to clean up material that were on shore. The spill was reported to Fire and Emergency Services and the Installation's on call Environmental Spill Manager was notified and responded to the emergency. The on shore spill material was cleaned up by 1830. Boom remained deployed until the sheen dissipated.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
1 August 2017, Engine/Motor Oil: At approximately 1400 on 1 August 2017, a spill occurred near the main pier at Third Port. Soldiers stationed aboard US Army Vessel 23 "The Hobkirk" were transferring oil from a 55 gallon drum into the vessels engine oil tank when back pressure caused a "burp" resulting in the release of approximately 2 gallons of oil into Skiffes creek.	The spill was reported to Fire and Emergency Services, the Harbor Master, and the Installation's spill program manager. Boom was deployed and absorbents were utilized to mediate the spill. Upon further investigation it was discovered that the soldiers were utilizing a mislabeled line which led to the vessels used oil tank, not the engine oil tank. This line had a closed valve which caused the "burp", resulting in the release.	The line has been labeled correctly, the personnel involved will be retrained, and in the future, more experienced personnel will be on hand during all vessel operations.
1 November 2017, Unknown Material: Cause unknown, 0 gallons At approximately 1435 hours on 01 November 2017, military personnel at Third Port were preparing to disembark a vessel when they noticed a sheen and immediately contacted the Harbor Master. The Harbor Master from Third Port then notified the Fort Eustis Fire Department and Environmental personnel of a sheen in the water. An investigation into the cause was conducted, and it was discovered that the sheen was coming from a storm drain outfall which was being flushed by an exceptionally high tide.	Boom was deployed to contain the sheen, and absorbents were placed to recover the contamination. The source of the petroleum is unknown.	The storm drain will be cleaned, and inspected to ensure there is no residue remaining, and absorbent boom will remain around the outfall until there is no evidence of any remaining contamination.
22 January 2018, Raw Sewage: On 22 January 2018 at approximately 1622 hrs a crew from Old Dominion Utility Services (ODUS) responded to a spill in the vicinity of Building 2951 (Summerall Circle and Wilson Ave). Upon arrival, ODUS determined that the lift station malfunctioned causing a release of sewage in excess of 2000 gallons.	Fort Eustis Fire and Emergency Services arrived on site at 1642 hrs, 733 Environmental Element on call Spill Responder was also notified and arrived onsite at 1715 hrs. ODUS was able to recover approximately 200 gallons and limed the area as part of the cleanup effort. The sewage was released to the Warwick River.	ODUS will continue to investigate cause of the equipment failure and repair as needed.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
17 September 2018, Oily Substance: On 17 September 2018 at approximately 1100 hours military personnel operating vessels in Third Port noticed a sheen on Skiffes creek and a fuel smell as they passed the boat ramp. They contacted Port Operations who then notified Fort Eustis Fire and Emergency Services, and Fort Eustis Environmental. It was discovered that a black tar like oil was slowly bubbling up near a corner of the sheet piling surrounding the boat ramp.	The area was immediately boomed off, and absorbent boom and pads were utilized to start absorbing the oil. Staff began investigating further and discovered a hole approximately the size of a baseball at the bottom of the sheet piling and when it was probed more oil was released. Absorbent pads were placed inside the hole and checked and replaced several times over the next 24 hours to mitigate any future releases, and to try and determine the extent of contamination. A decision was made to excavate a small area near the ramp to determine if this was a small discharge or if a larger contamination issue existed. During the excavation, an area of concern was discovered at which point the excavation was terminated, and procedures to obtain a contractor for a more extensive investigation and clean-up were initiated. The original area of discharge will remain boomed to prevent any impact upon Skiffes Creek until Fort Eustis can determine the exact cause of the contamination, and conduct remediation activities.	The area was excavated to remove any contaminated media.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
11 October 2018, Transformer Oil: On 11 October, 2018, at approximately 2319 hours, JBLE-Eustis Fire and Emergency Services responded to a downed power pole with three transformers between buildings 1028 and 1010 on Shultz Place (on base). Dominion Virginia Power personnel were on site to shut off power and assist with the emergency. Fire personnel determined the situation was a hazard due to Tropical Storm Michael producing torrential rains and approximately 30 mph winds; they decided to secure the site/return to the base fire station, and wait until daylight after the storm had passed before seeing if any further action needed to be taken. Therefore, they could not see that dielectric fluid (non-polychlorinated biphenyls (PCB) mineral oil) had been released from the downed pole's three mounted transformers, and had bee flushed by the heavy rain event into the storm sewer inlet approximately 15 ft away. Environmental personnel were not notified until the daylight site reconnaissance, at approximately 07:00, environmental personnel determined approximately 25 to 30 gallons of dielectric fluid had entered into a drop inlet less than 10 feet from the downed power pole.	The inlet grate was removed and no visible dielectric fluid was observed. The investigation continued to the next in line drop inlet and again no dielectric fluid was found. Further investigation at outfall 032, where the storm water flow travels, found the dielectric fluid had entered a small creek. This creek eventually discharges into Eustis Lake. Environmental personnel traced the creek bed and found ten places where the dielectric fluid was pooling. The fluid was being contained and pooled by downed tree limbs and leaf debris which had fallen along the creek's surface from the storm. The furthest pool of fluid had travelled approximately 300 yards from the spill site. Further investigation determined no dielectric fluid had entered Eustis Lake. Absorbent pads, socks and pillows were placed at ten locations to absorb the dielectric fluid. Base environmental staff removed and properly disposed of all absorbent pads on 15 October, 2018.	No Further Action
9 November 2018, Sewage: On 9 November, 2018, at approximately 0900 hours, JBLE-Eustis Fire and Emergency Services and Old Dominion Utility Services (ODUS) responded to a Sanitary Sewage Overflow from a sanitary manhole near Lee Blvd. and Levy Place. ODUS personnel used a jetter to unclog the sanitary line to stop the overflow. The clog was caused by FOG and debris being improperly discharged into the sewer lines. Approximately 200 gallons of raw sewage entered the drainage ditch between the railroad tracks and the fence along Lee Blvd.	ODUS personnel used a vac truck to remove the contaminated stormwater from the drainage ditch, a total of approximately 2000 gallons of water was retrieved. An inspection of the drainage area of Municipal outfall 115 determined the spill had been contained within the drainage ditch and did not enter into Bailey's Creek, the nearest waterbody to the outfall. Environmental personnel responded and remained on site until recovery operations were completed. Lime was placed along the drainage ditch to neutralize and remnants of sewage that could not be recovered.	Residents were reminded of what can be disposed of into the sanitary system.

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
18 December 2018, Diesel Fuel: On 18 December, 2018, at approximately 1030 hours, contractors working for Burgess Corporation were transporting a portable above ground storage tank with a forklift in preparation to conduct refueling of a semi-permanent crane. During transport, the tank shifted and slid off of the forks and toppled over causing a release of approximately 125 gallons of diesel fuel onto the ground with approximately 35 gallons entering Milstead Creek.	Personnel responded immediately, securing the spill by placing absorbent boom and pads in the creek, and utilizing absorbent material to absorb the fuel on the ground. All contaminated soil was removed, no sheen remained, and remediation activities were concluded on 19 December 2018 at approximately 1700 hours.	The contractor was retrained on the proper transportation of portable storage tanks.
9 August 2019, Dye: On 9 August 2019, at approximately 1210 hours, Soldiers from the 128th Aviation Brigade noticed a bright green substance in the small creek behind their building. The Soldiers notified Fort Eustis Fire and Emergency Services, who then responded to the scene and notified the Eustis Environmental Office. The release was investigated and it was determined that it began in a storm water drop inlet in the middle of the motor pool at building 2505 Jackson Ave.	The organization in that building is not authorized to purchase dye packs as part of their supply, and their mission does not dictate a need for them. It is believed that an unknown individual from the organization either found the pack or brought it from a different location and then illicitly discharged the pack into the storm system.	No Further Action
28 July 2020, Cooking Oil: On 28 July 2020, at approximately 0700 hours, the Dining Facility at building 2300 was receiving a delivery of supplies including Liquid Shortening (cooking oil) from US Foods when during the unloading process one 35 pound container fell off the pallet. This occurred while the pallet was being moved by pallet jack and was due to insufficient shrink wrap and human error. When the container ruptured, approximately 2 gallons of cooking oil were discharged onto the loading dock with 1 gallon reaching a trench drain that leads to the storm water system.	The delivery driver placed loose absorbent material provided by Dining Facility personnel on the spill and Fort Eustis Fire and Emergency Services and the environmental Office were notified. The storm drain was secured with absorbent boom, and US foods contacted a contractor to steam clean the dock and trench drain as well as capture and remove any residual cooking oil and wash water. Clean up was completed on 29 July 2020.	No Further Action

Date and Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
<u>3 August 2020, Fuel:</u> On 3 August 2020, at approximately 1310 hours, soldiers of the 73rd Transportation Company, 10th Transportation Battalion, were performing an internal fuel transfer on the US Army floating crane the *Keystone State.* The fuel was being transferred from the barge tanks to the wheelhouse of the cane, a relatively common practice, when the soldiers mistakenly misaligned the valves used for transferring fuel. This caused they system to become over pressurized, activating the pressure release device, and discharging approximately 10 gallons onto the deck and overboard.	Under normal circumstances any discharge from the pressure release device would be captured in a catch basin which it is housed in, however, due to the high pressure release the catch basin was ineffective, and the fuel was released into Skiffes Creek. Due to SOP's, which require personnel to be present during transfers to oversee the operation, the discharge was recognized as soon as it occurred and transfer operations were suspended immediately.	The soldier was retrained on the procedures for internal fuel transfers.

Annex 5. Training and Exercises/Drills[92]

This Annex contains a description of the training and exercise programs conducted at JBLE- Eustis as well as documentation that required training and exercises have been conducted on a regular basis.

5.1 Personnel Training Program[93]

CEIE is also responsible for conducting Advanced Environmental Management (AEM) Training which is conducted on a semi-annual basis. Each organization is required to have at least one environmental representative attend this training. Each organization maintains records of their personnel's training.

JBLE-Eustis personnel will not be allowed to respond to incidents unless they have received the proper training and are familiar with substances used during normal job functions.

The purpose of the training is to provide facility personnel with the necessary information/skills to perform their assigned duties.

- Personnel will be provided Basic Environmental Management Awareness (BEMA) or Leadership Environmental Management Awareness and Competency (LEMAC) training. These training programs include Spill and emergency Response training and the Occupational Safety and Health Administration's (OSHA) Hazard Communication training (29 CFR §1910.1200). Training will include the necessary personal protective equipment used to minimize risks to employees when they are expected to handle incidental releases.
- Personnel will be provided training regarding additional handling responsibilities for fuel and oil handling and storage and container inspection requirements depending upon their duty descriptions. This additional training may be on-the-job or by instructional materials.

Training Components

BEMA Training and Spill and Emergency Response training are part of the Hazardous Waste Operations and Response (HAZWOPER) training at JBLE-Eustis. This training ensures that employees are aware of the following:

- Presence and location of chemicals or hazardous materials in assigned work areas,
- Spill prevention procedures,
- Awareness of both state and federal laws regulating the activities performed at the facility,
- How to contact the IC and/or CEIE upon observing any abnormality,
- How to initiate an emergency response to an incident,
- Potential physical and health hazards of chemicals found in the building,
- Where to obtain information on the physical and health hazards of the materials found in the building,
- How to use and understand an SDS,
- How to recognize the signs or symptoms of chemical exposure,
- What to do in the event of chemical exposure,

[92] 40 CFR Part 112 Appendix F 1.7.1, 1.8.2; 33 CFR §154.1035(c)
[93] 40 CFR Part 112 Appendix F 1.8.3

- What the levels of personal protection against the chemical hazards are and how they are used to prevent chemical exposure,
- Inspection requirements of material storage and handling areas, and
- Location of and requirements to maintain emergency response equipment (e.g., spill kits).

Additionally, personnel handling hazardous material will be trained in:

- The operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols;
- Applicable pollution control laws, rules, and regulations;
- General facility operations; and
- The contents of the ICP.

Discharge prevention briefings for personnel handling material will be scheduled and conducted at least once per year to maintain an adequate understanding of the ICP. Such briefings will highlight and describe known discharges as described in **Annex 4**, or failures, malfunctioning components, and any recently developed precautionary measures.

This training will be provided by CEIE or a designated QI upon the initial hire of an employee and repeated on an annual basis (i.e., refresher training). The CEIE will also provide training to contractors and vendors prior to their work at the installation. Training documentation is maintained by the installation.

The CEIE or the designated IC will provide the OSHA-required training. Responsibilities include:

- Providing trainers meet the requirements of 29 CFR §1910.120(q)(7)(i),
- Certifying that each individual is trained and demonstrates competence in their assigned area of responsibility,
- Certifying that each individual receives refresher training or demonstrates competence on an annual basis, and
- Maintaining a record of the methodology used to recertify those individuals who demonstrate competence.

QI and IC Training[94]

The Incident Commander (Fire Chief and Deputy Fire Chief) will complete Incident Commander Training. The QI will betrained to implement the ICP.

5.2 Worst Case Drills/Exercises[95]

Pursuant to 40 CFR §112.21(c), JBLE-Eustis must develop a program of facility response drills and exercises, including evaluation procedures. Following the *National Preparedness for Response Exercise Program (PREP) Guidelines* (2016.1) satisfies the facilities requirement for drills and exercises. The PREP Guidelines specify that internal and external drills and exercises be conducted.

5.2.1 Internal Exercises

Internal exercises are performed by JBLE-Eustis personnel responsible for oil spill response and do not involve other members of the response community. At least one Spill Management Team

[94] 40 CFR Part 112 Appendix F 1.2.5
[95] 33 CFR §154.1055

(SMT) tabletop exercise in the triennial exercise cycle must involve a worst case discharge scenario under adverse conditions.

The internal exercises will include:

- QI Notification Drills,
- SMT Tabletop Exercises,
- Equipment Deployment Exercises, and
- Unannounced Drills.

Credit for a facility-specific exercise will be given to JBLE-Eustis for an actual response to a discharge in the area if the Facility Response Plan (FRP) was used for response to the discharge and the objectives of the exercise were met and were properly evaluated, documented, and self-certified.

Table A5-1, Internal Exercises, describes the frequency, participating elements, initiating authority, scope, objectives, and certifications of the internal exercises.

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Table A5-1. Internal Exercises

Drill Type	Participating Elements	Initiating Authority	Scope	Objectives	Certification
Quarterly (4/Year)					
QI Notification Exercise	Facility personnel and QI	JBLE-Eustis (QI, FES, or CES)	Exercise communications between the facility and the QI.	Contact must be made with the QI. At least once a year, the QI Notification exercise should be conducted during non-business hours.	Self-certification
Semiannually (2/Year)					
Facility-Owned Equipment Deployment Exercise	Facility personnel	JBLE-Eustis (QI, FES, or CES)	Deploy and operate facility-owned and operated response equipment identified in the FRP. The equipment to be deployed will be the equipment the equipment necessary to respond to a small discharge at the facility. All of the facility personnel involved in equipment deployment operations must be included in a comprehensive training program and a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturers' recommendations and best commercial practices. All inspection and maintenance must be documented.	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure the equipment is in proper working order	Self-certification
Annually (1/Year)					
OSRO-Owned Equipment Deployment Exercise	OSRO personnel	JBLE-Eustis (QI, FES, or CES) or OSRO	Deploy and operate facility-owned and operated response equipment identified in the FRP. The equipment to be deployed will be the equipment the equipment necessary to respond to a small discharge at the facility. All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program and a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure the equipment is in proper working order	Verify that the OSRO provides adequate documentation that the exercise requirements have been met.

Drill Type	Participating Elements	Initiating Authority	Scope	Objectives	Certification
			inspected and maintained in good operating condition in accordance with the manufacturers' recommendations and best commercial practices. The OSRO must provide inspection and maintenance documentation to JBLE-Eustis. JBLE-Eustis must verify that the OSRO performs annual equipment deployment exercises in their operating environment.		
SMT Exercise	SMT as established in the FRP	JBLE-Eustis (QI, FES, or CES)	Exercise the SMT's organization, communication, and decision-making in managing a spill response. At least one SMT tabletop exercise in the triennial cycle should involve a worst case discharge scenario in adverse weather conditions.	Exercise the SMT in a review of: a) Knowledge of the response plan. b) Proper notifications. c) Communications system. d) Ability to access the OSRO. e) Coordination of internal organization personnel with responsibility for spill response. f) Review of the transition from a local team to a regional, national, and international team, as appropriate. g) Ability to effectively coordinate response activity with the National Response System* infrastructure. h) Ability to access information in the Area Contingency Plan for location of sensitive areas, resources available within the area, unique conditions of the area, etc.	Self-certification
Unannounced Drill	Facility personnel, QI, and/or SMT	JBLE-Eustis (QI, FES, or CES)	Annually, each plan holder should ensure that one of the following exercises is conducted unannounced: • SMT tabletop exercise; or • Equipment deployment exercise.	To ensure that the facility maintains an adequate posture for response preparedness, and to satisfy the OPA 90 requirement for unannounced exercises, it is necessary to have an exercise program, which is comprised of both announced and unannounced exercises.	Self-certification for the type of exercise

Drill Type	Participating Elements	Initiating Authority	Scope	Objectives	Certification
			An unannounced exercise is where the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill incident.	The requirement for the annual unannounced exercise is essential to maintain the level of preparedness necessary to effectively respond to a spill.	
Triennial (Every 3 Years)					
Government-Initiated Unannounced Exercise	USEPA-regulated FRP holders	USEPA	Unannounced exercises are limited to a maximum of 10 percent of response plan holders per USEPA region per year. Exercises are limited to approximately 4 hours in duration. Exercises should involve response to a small discharge scenario (assume 2,100 gallons outside secondary containment and discharged into or on navigable waters and adjoining shorelines). Exercise would involve deployment of response equipment identified in the FRP to respond to spill scenario.	Conduct proper notifications to respond to unannounced scenario of a small discharge. Demonstrate that the response is timely, conducted with adequate amount of equipment for the scenario, and properly conducted.	USEPA
Quadrennial (Every 4 Years)					
Area Exercise	Appropriate federal, state, and local government and industry and other members of the response community	USCG or USEPA	Area exercises will exercise the area response community.	Exercise the ACP, along with selected industry response plans. Exercise the response management system identified in the ACP and, to the extent possible, the Unified Command with the appropriate participants. Exercise the area and industry Incident (Spill) Management Teams. Deploy adequate response equipment for the exercise scenario. At a minimum, the scenario must involve exercise of Tier 1 WCD capability.	OSC

Drill Type	Participating Elements	Initiating Authority	Scope	Objectives	Certification
*National Response System (defined by the PREP Guidelines) includes the National Response Team, Regional Response Teams, Area Committees, State and Federal On-Scene Coordinators, and state and local government entities involved with response planning and coordination. Note: The exercises in this table are based on the National PREP Guidelines (2016.1). OPA = Oil Pollution Act					

5.2.2 Qualified Individual Notification[96]

The purpose of the QI notification exercise is to ensure that the QI (or designee) can be reached in a spill response emergency to carry out the required duties. The IC on duty is normally reached through the FES which operates 24 hours a day.

To satisfy FRP requirements, the QI notification exercise will be conducted during non-duty hours at least once a year. Any time the QI is notified during an actual event and this occurrence is properly documented, the notification will serve as satisfying this requirement. The CES will coordinate the exercise with the QI.

Table A5-2 summarizes the QI notification exercise and **Table A5-3** provides a format for recording the exercise.

Table A5-2. QI Notification Exercise Summary

Applicability:	JBLE-Eustis
Frequency:	Quarterly
Initiating Authority:	JBLE-Eustis
Participating Elements:	JBLE-Eustis personnel and QI
Scope:	Exercise communications between installation personnel and QI
Objectives:	Voice contact must be made with a QI or designee, as designated in the FRP. Electronic messaging may be used only if communication by voice is not possible.
Certification:	Self-certification
Verification:	USEPA, Region 3
Records:	Retained for 5 years at JBLE-Eustis CES
Evaluation:	Self-evaluation
Credit:	JBLE-Eustis will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

[96] 40 CFR Part 112 Appendix F 1.8.2

Table A5-3. Internal Exercise Documentation Form - Qualified Individual Notification

1. Date performed:		2. Exercise or actual response?		
3. Vessel/Facility/Pipeline/Offshore Facility Initiating Exercise:				
4. Name of person notified:				
5. Is this person identified in your response plan as QI or designee?				
6. Time Initiated:		7. Time in which QI or designee responded:		
8. Method used to contact (check all that apply):	Telephone (Land Line)	Telephone (Cell)	Pager	Radio
	Other:			
9. Description of notification procedure:				
10. Description of emergency scenario				
11. Identify which of the 15 core components of your response plan were exercised during this particular exercise:				
12. Evaluation				
13. Changes to be implemented (lessons learned) and timetable for implementation:				
14. Certifying Signature:				
Retain this form for a minimum of 5 years at JBLE-Eustis CES (for USEPA).				

5.2.3 Spill Management Team Exercises[97]

All organizations involved in response operations including the contracted spill responders and the FRT, should conduct an annual SMT tabletop exercise in accordance with the PREP Guidelines. The ICP will be used in the exercise to ensure the spill management team is familiar with the ICP and is able to use it effectively to conduct a spill response. At least one SMT tabletop exercise in a triennial cycle will involve a worst case discharge scenario during adverse weather conditions.

Table A5-4 summarizes the SMT tabletop exercise and **Table A5-5** provides a format for documenting the exercise.

Table A5-4. SMT Tabletop Exercise Summary

Applicability:	JBLE-Eustis FRT
Frequency:	Annually
Initiating Authority:	40 CFR §112.2
Participating Elements:	SMT as established in the FRP
Scope:	Exercise the SMT's organization, communication, and decision-making in managing a spill response.
Objectives:	Exercise the SMT in a review of: a) Knowledge of the response plan; b) Proper notifications; c) Communications system; d) Ability to access an OSRO; e) Coordination of internal organization personnel with responsibility for spill response; f) An annual review of the transition from a local team to a regional, national, and international team, as appropriate; g) Ability to effectively coordinate spill response activity with the National Response System (NRS) infrastructure. (If personnel from the NRS are not participating in the exercise, the spill management team should demonstrate knowledge of response coordination with the NRS.) h) Ability to access information in ACP for location of sensitive areas, resources available within the area, unique conditions of area, etc. At least one SMT tabletop exercise in a triennial cycle will involve simulation of a worst case discharge scenario.
Certification:	Self-certification
Verification:	USEPA, Region 3
Records:	Retained for 5 years by JBLE-Eustis CES
Evaluation:	Self-evaluation
Credit:	JBLE-Eustis will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

[97] 40 CFR Part 112 Appendix F 1.8.2

Table A5-5. Internal Exercise Documentation Form – SMT Tabletop Exercise

1. Date performed		2. Exercise or actual response:	
If an exercise, announced or unannounced:			
3. Location of tabletop:			
4. Time started:		5. Time completed:	
6. Response plan scenario used (check one):		Average most probable discharge	
		Maximum most probable discharge	
		Worst case discharge	
7. Size of (simulated) spill (gallons):			
8. Describe the emergency scenario:			
9. Describe how the following objectives were exercised:			
a) Spill management team's knowledge of oil-spill response plan:			
b) Proper notifications:			
c) Communications system:			
d) Spill management team's ability to access contracted oil spill removal organizations:			
e) Spill management team's ability to coordinate spill response with On-Scene Coordinator, state, and applicable agencies:			
f) Spill management team's ability to access sensitive site and resource information in the Area Contingency Plan:			
10. Identify which of the 15 core components of your response plan were exercised during this particular exercise:			
11. Evaluation:			
12. Changes to be implemented (lessons learned), including timetable for implementation:			
14. Certifying Signature:			
Attach a description of the lesson(s) learned and person(s) responsible for follow up of corrective measures. Retain this form for a minimum of 5 years at JBLE-Eustis CES (for USEPA).			

5.2.3.1 Equipment Deployment Exercises[98]

The two primary requirements for the equipment deployment exercise are described below.

Personnel that will normally operate or supervise the operation of the response equipment will participate in the exercise. The personnel will demonstrate their ability to deploy and operate the equipment. All personnel involved in equipment deployment and operation will be involved in a training program.

The response equipment will be in good operating condition. The equipment will be appropriate for the intended operating environment. The equipment will operate during the exercise. All response equipment will be included in a maintenance program.

FRT personnel who operate facility-owned equipment will be involved in the equipment deployment exercises (see **Table A5-6**, Facility-Owned Equipment Deployment Exercise Summary). This equipment will be deployed twice a year. JBLE-Eustis will deploy the minimum amount of equipment, or that amount of equipment necessary to respond to a small discharge.

FRT personnel and the response contractor personnel who operate equipment will be involved in the equipment deployment exercises (see **Table A5-7**, OSRO-Owned Equipment Deployment Exercise Summary). This equipment will be deployed once a year. JBLE-Eustis and the response contractor will deploy the minimum amount of equipment, or that amount of equipment necessary to respond to a small discharge.

Table A5-8 provides a format for recording the equipment deployment exercises.

Table A5-6. Facility-Owned Equipment Deployment Exercise Summary

Applicability:	JBLE-Eustis with facility-owned and operated response equipment
Frequency:	Semi-annually
Initiating Authority:	40 CFR §112.2
Participating Elements:	JBLE-Eustis personnel
Scope:	Deploy and operate installation owned and operated response equipment identified in the response plan. The equipment to be deployed would be either: 1) The minimum amount of equipment for deployment as described in "Guiding Principles," of the PREP Guidelines or 2) The equipment necessary to respond to an average most probable discharge at the facility, whichever is less. All of the JBLE-Eustis personnel involved in equipment deployment operations and all of the installation equipment must be included in a comprehensive training program and a comprehensive maintenance program. Credit will be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. All inspection and maintenance must be documented by the appropriate organization.
Objectives:	Demonstrate ability of installation personnel to deploy and operate equipment. Ensure equipment is in proper working order.
Certification:	Self-certification

[98] 40 CFR Part 112 Appendix F 1.8.2

Verification:	USEPA, Region 3
Records:	Retained for 5 years by JBLE-Eustis CES
Evaluation:	Self-evaluation
Credit:	JBLE-Eustis will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Table A5-7. OSRO-Owned Equipment Deployment Exercise Summary

Applicability:	OSRO-owned and operated response equipment
Frequency:	Annually
Initiating Authority:	40 CFR §112.2
Participating Elements:	OSRO (Response Contractor)
Scope:	Deploy and operate facility-owned and operated response equipment identified in the ICP. The equipment to be deployed will be the equipment the equipment necessary to respond to a small discharge at the facility. All of the OSRO personnel involved in equipment deployment operations must be included in a comprehensive training program and a comprehensive maintenance program. Credit should be taken for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturers' recommendations and best commercial practices. The OSRO must provide inspection and maintenance documentation to JBLE-Eustis. JBLE-Eustis must verify that the OSRO performs annual equipment deployment exercises in their operating environment.
Objectives:	Demonstrate ability of Base and OSRO personnel to deploy and operate equipment. Ensure equipment is in proper working order.
Certification:	Verify that the OSRO provides adequate documentation that the exercise requirements have been met.
Verification:	USEPA, Region 3
Records:	Retained for 5 years by JBLE-Eustis CES
Evaluation:	Self-evaluation
Credit:	JBLE-Eustis will take credit for this exercise when conducted in conjunction with other exercises as long as all objectives are met, the exercise is evaluated, and a proper record is generated. Credit will be taken for an actual spill response when these objectives are met, the response is evaluated, and a proper record is generated.

Table A5-8. Internal Exercise Documentation Form - Equipment Deployment Exercise

1. Date performed:		2. Exercise or actual response:	
3. If an exercise, announced or unannounced:			
4. Deployment location(s):			
5. Time started:		6. Time completed:	
7. Equipment deployed was:	Facility-owned		
	OSRO-owned (include OSRO name):		
	Both		
8. List type and amount of all equipment (e.g., boom and skimmers) deployed and number of support personnel employed:			
9. Describe goals of the equipment deployment and list any Area Contingency Plan strategies tested. (*Attach a sketch of equipment deployments and booming strategies*)			
10. For deployment of facility-owned equipment, was the amount of equipment deployed <u>at least</u> the amount necessary to respond to the average most probable spill:			
11. Was the equipment deployed in its intended operating environment?			
12. For deployment of OSRO-owned equipment, was a representative sample (at least 1,000 feet of each boom type and at least one of each skimmer type) deployed?			
13. Was the equipment deployed in its intended operating environment?			
14. Are all facility personnel that are responsible for response operations involved in a comprehensive training program, and all population response equipment involved in a comprehensive maintenance program? If so, describe the program:			
15. Date of last equipment inspection:			
16. Was the equipment deployed by personnel responsible for its deployment in the event of an actual spill?			
17. Was all deployed equipment operational?		Yes	No

If no, why not:	
18. Identify which of the 15 core components of your response plan were exercised during this particular exercise:	
19. Changes to be implemented (lessons learned), including timetable for implementation:	
20. Certifying Signature:	
Attach a description of the lesson(s) learned and person(s) responsible for follow up of corrective measures. Retain this form for a minimum of 5 years at JBLE-Eustis (for USEPA).	

5.2.3.2 Internal Unannounced Exercises[99]

This is not a separate exercise. This section outlines the requirement that one of the PREP exercises listed above must be conducted unannounced. An unannounced exercise is when the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill event.

Annually, one of the following exercises will be conducted unannounced:

- Spill management team exercise; or
- Equipment deployment exercise.

Response to an actual spill will be evaluated and taken as credit for the unannounced exercise requirement.

5.2.4 External Exercises[100]

External exercises extend beyond the internal focus of JBLE-Eustis and include other members of the response community. External exercises will be initiated by the USEPA and developed to examine the FRP and JBLE-Eustis ability to coordinate with the response community to conduct an effective response to a spill incident

5.2.4.1 Area Exercises

The primary purpose of the area exercise is to activate and observe the response infrastructure in the area, and the ability of the entire response community to effectively conduct a spill response. The response community includes the federal, state, and local government and industry. The area exercises are designed to exercise the government and industry interface for spill response.

The exercise scenario will involve some amount of equipment deployment.

5.2.4.2 Government-Initiated Unannounced Exercises

The government initiated unannounced exercises (GIUEs) are designed to give the USEPA the opportunity to evaluate, on a random basis, the response preparedness of JBLE-Eustis. The

[99] 40 CFR Part 112 Appendix F 1.8.2
[100] 40 CFR Part 112 Appendix F 1.8.2

government is limited to a maximum of 10 percent of response plan holders per USEPA Region per year. Exercises are limited to approximately 4 hours in duration.

The GIUE will typically involve a response to a small discharge scenario (assume 2,100 gallons outside secondary containment and discharged into or on navigable waters and adjoining shorelines).

JBLE-Eustis is required to participate as directed in the GUIE, as requested by USEPA. The cost of the exercise is incurred by the facility. JBLE-Eustis would not be required to participate in another GIUE for at least 36 months from the time of the last GIUE. The facility must maintain documentation of participation in the GIUE for at least 5 years.

Table A5-9 summarizes the exercise and **Table A5-10** provides a format for documenting the GIUE.

Table A5-9. Government-Initiated Unannounced Exercise Summary

Applicability:	JBLE-Eustis as an USEPA-regulated facility response plan holder
Frequency:	As selected (Plan holders who have been selected for participation in a PREP GIUE will not be required to participate in another one for at least 36 months from the date of the GIUE.)
Initiating Authority:	USEPA, Region 3
Participating Elements:	USEPA-regulated facility response plan holders
Scope:	Unannounced exercises are limited to a maximum of 10 percent of response plan holders per USEPA Region per year. Exercises are limited to approximately 4 hours in duration. Exercises should involve response to a small discharge scenario (assume 2,100 gallons outside secondary containment and discharged into or on navigable waters and adjoining shorelines). Exercise would involve deployment of response equipment identified in the FRP to respond to spill scenario.
Objectives:	Conduct proper notifications to respond to an unannounced scenario of a small discharge. Demonstrate that the response is: • Timely, • Conducted with adequate amount of equipment for scenario, and • Properly conducted.
Certification:	USEPA, Region 3
Verification:	USEPA, Region 3
Records:	Retained for 5 years by JBLE-Eustis CES
Evaluation:	Evaluation to be conducted by initiating agency
Credit:	Credit may be granted by the initiating authority for an actual spill response when the PREP objectives are met, the response is evaluated by the initiating authority, and a proper record is generated. The Base may take credit for notification and equipment deployment exercises if criteria for those exercises are met, the response is evaluated by JBLE-Eustis, and a proper record is generated.

Table A5-10. Government-Initiated Unannounced Exercise Documentation Form

1. Date performed:			
2. Time started:		Time completed:	
3. Description of the exercise:			
4. Describe what objectives were met in the exercise:			
5. Identify which of the 15 core components of your response plan were exercised during this particular exercise:			
6. Changes to be implemented (lessons learned), including timetable for implementation:			
7. Certifying Signature:			
Attach a description of the lesson(s) learned and person(s) responsible for follow up of corrective measures. Retain this form for a minimum of 5 years at JBLE-Eustis CES (for USEPA).			

5.2.5 Triennial Exercise of the Entire Response Plan

Every 3 years, all components of the entire FRP portion of the ICP must be exercised. Rather than requiring each plan holder to conduct a major exercise every 3 years, the PREP Guidelines allow for individual components to be exercised in portions through the required exercises. The following are the 15 types of plan components, under three categories, that must be exercised at least once every 3 years:

- Organizational Design
  - Notifications
  - Staff mobilization
  - Ability to operate within the response management system described in the FRP
- Operational Response
  - Discharge prevention/control
  - Assessment of discharge, potential discharge, or fire
  - Containment of discharge/fire suppression
  - Recovery of spilled material
  - Protection of sensitive areas
  - Disposal of recovered material and contaminated debris
- Response Support
  - Communications
  - Transportation
  - Personnel support
  - Equipment maintenance and support
  - Procurement
  - Documentation

The JBLE-Eustis exercise evaluation team will ensure these components (where applicable) are properly addressed in their spill exercises. To satisfy the requirement of the triennial exercise of the entire Plan, it is not necessary to execute the entire Plan at one time. The FRP may be exercised in segments over a period of 3 years, as long as each component of the FRP is exercised at least once within the 3-year period.

In the triennial cycle, the following internal exercises will be conducted:

- 12 QI Notification Exercises;
- Three SMT Exercises: one will involve a worst case discharge scenario under adverse weather;
- Three Internal Unannounced Exercises: any of the exercises, with the exception of the QI notification exercise, if conducted unannounced, will satisfy this requirement;
- Six Base-Owned and Operated Equipment Deployment Exercises;
- Three OSRO-Owned and Operated Equipment Deployment Exercises (responsibility of OSRO); and
- Triennial Exercise of Entire Response Plan: each component of the response plan must be exercised at least once in the triennial cycle.

5.2.6 Other Credit Issues

There are three other credit issues that pertain to JBLE-Eustis:

- Credit for an actual spill response
- Proper documentation for self-certification
- LEPC drill credit

5.2.6.1 Credit for an Actual Spill Response

JBLE-Eustis will take credit for internal exercises conducted in response to actual spills. The spill response must be properly evaluated and documented. The National Scheduling and Coordinating Committee is responsible for authorizing credit for area exercises according to the following circumstances:

- The response plan was used in an actual spill response.
- The response involved the entire response community.
- The objectives of the area exercise were met as outlined in the PREP Guidelines.
- The response was evaluated.
- The spill response was properly documented and certified, including:
  - The type and amount of product spilled/released/recovered; and
  - Detailed information on how each of the major objectives listed in the report were met.

Actual spills must involve, at a minimum, deployment of worst case discharge Tier 1 capabilities to be eligible for this credit.

5.2.6.2 Proper Documentation for Self-Certification

Proper documentation for self-certification will include, as a minimum, the following information:

- The type of exercise,
- Date and time of the exercise,
- A description of the exercise,

- The objectives met in the exercise,
- The components of the response plan exercised, and
- Lessons learned.

This documentation must be in writing and signed by an individual empowered within the FRP.

As a general rule, exercise records should be completed within 60 days of the exercise.

5.2.6.3 LEPC Drill Credit

LEPCs are required to conduct exercises periodically. JBLE-Eustis will coordinate their exercises with the LEPCs, whenever possible, and should take credit, as long as the PREP exercise objectives are met.

5.3 Annual Spill Response Training for FES Personnel[101]

The FES personnel annual training program, including OSHA refresher training, is accomplished and certified. Training includes the use and maintenance of response equipment. Records are maintained with FES.

At the completion of the training, documentation is completed using the appropriate logs in **Attachment 5A**, certificates, sign-in rosters or other documentation. The SMT Tabletop Exercise Logs are located in **Attachment 5A**. These completed forms will be filed at CEIE and will be available for inspection by regulatory agencies. Keep completed forms and logs for at least 5 years after the date of the training.

Owner/operators of oil transfer, storage, and handling facilities are required to conduct periodic discharge prevention meetings with operator personnel assigned to these facilities. Discharge Prevention Meeting Log forms are provided in **Attachment 5A**. Personnel response training logs are located at **Attachment 5A**. Supervisors are required to maintain copies of this training for inspection by regulatory agencies. Keep completed forms and logs for at least 5 years after the date of the training.

5.4 Equipment Testing

As required by the OPA 1990 and the USCG requirement (33 CFR Part 154), JBLE-Eustis will conduct unannounced deployment exercises, unless supplemented by actual events, of response equipment on an annual basis. These exercises require that response equipment identified in this Plan be deployed and operated within the intended operating environment. The purpose of the equipment deployment exercise is to make sure that the response equipment identified in this Plan is operable and that personnel responsible for operating the equipment are capable of doing so.

JBLE-Eustis primary spill response contractor is HEPACO, a recognized "Level E" OSRO. As part of the annual testing, JBLE-Eustis will request documentation from the OSRO that equipment has been deployed and tested at a simulated or actual spill site. It is not necessary that every piece of equipment identified in the Plan or the OSRO inventory be deployed and operated, as only a representative sample of each type of equipment needs to be included.

At the termination of the equipment deployment and/or testing exercise, documentation will be completed, using the checklists in **Attachment 5A**.[102] Completed forms are to be filed with this

[101] 40 CFR Part 112 Appendix F 1.3.4, 1.8.3; 33 CFR §154.1050
[102] 40 CFR Part 112 Appendix F 1.3.3

plan for inspection by regulatory agencies, and are located at **Attachment 5A.** Keep completed forms and logs for at least 5 years after the date of the exercise.[103]

[103] 40 CFR Part 112 Appendix F 1.8.1.2

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ATTACHMENT 5A
TRAINING AND EXERCISE DRILL LOGS AND EQUIPMENT CHECKLISTS[104]

- Qualified Individual Notification Exercise Log
- SMT Tabletop Exercise Log
- Discharge Prevention Meeting Log
- Personnel Response Training Log
- Response Equipment Testing and Deployment Drill Log
- Response Equipment Inspection Checklist

[104] 40 CFR Part 112 Appendix F 1.8.1, 1.8.1.2, 1.8.2.1, 1.8.2.2, 1.8.3; 33 CFR §154.1055; 33 CFR §154.1055; 33 CFR §154.1057

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Qualified Individual Notification Exercise Log

Date:	Exercise Coordinator:
Qualified Individual (QI)	
Emergency Scenario:	
Other agencies included in mock or actual drill (Fire, police, city, emergency manager, spill response contractor, regulatory agencies, etc.):	
Evaluation:	
Changes to be implemented:	
Milestones to implement changes:	
Names/Position of Personnel Participating:	

Name	**Position**

SMT Tabletop Exercise Log

Date:	Exercise Coordinator:
Qualified Individual (QI):	
Emergency Scenario:	
Other agencies included in mock drill (Fire, police, city, emergency manager, spill response contractor, regulatory agencies, etc.):	
Evaluation:	
Changes to be implemented:	
Milestones to implement changes:	
Names/Position of Personnel Participating:	

Name	**Position**

Discharge Prevention Meeting Log

Date:	Instructor:
Office/Agency:	
Agenda and Subjects/Issues Identified:	
Required Actions and Implementation Dates:	
Attendees:	

Name	**Position**

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Personnel Response Training Log

Name	Position/Title	Response Training Received			Prevention Training Received/Hours/Date		
		Training	Date	Hours	Training	Date	Hours

Response Equipment Testing and Deployment Drill Log

Date of Last Update: _____

Last Inspection or Response Equipment Test Date	Inspection Frequency	Last Deployment Drill Date	Deployment Frequency	Oil Spill Removal Organization Certification (if applicable)

Response Equipment Inspection Checklist

Date:	Inspector:	
Location:		
1. Pumps – Operational Status:		
Type:	Model:	Year:
Quantity:	Capacity:	
Daily Effective Recovery Rate:		
Accessibility (time to access and respond):		
Actual use/testing (last test date and frequency of testing):		
Shelf life/present age (expected replacement date):		
2. Boom – Operational Status:		
Type:	Model:	Year:
Quantity:	Size (length in feet):	
Containment Area (square feet):		
Storage Location:		
3. Sorbents – Operational Status:		
Type:	Year Purchased:	
Amount/Quantity:	Absorption Capacity (gallons):	
Storage Location(s)		

4. Hand Tools – Operational Status:

Type	Year Purchased	Quantity	Storage Location

5. Communication Equipment – Operational Status:

Type (include operating frequency and channel and/or cellular phone numbers)	Year Purchased	Quantity	Storage Location

6. Boats and Motors – Operational Status:			
Type	Year Purchased	Quantity	Storage Location

Annex 6. Response Critique and Plan Review and Modification Procedures[105]

This Annex describes procedures for modifying the ICP based on periodic plan review or lessons learned through an exercise or a response to an actual incident. A list of Plan amendments is maintained in the **ICP Section 1.3**.

Plan reviews and modifications through lessons learned, or response to an actual incident, are viewed as an integral part of JBLE-Eustis continuous improvement process.

6.1 Outline of Post Spill Critique

The following questions are intended as guidelines only; other questions are likely to be appropriate at each stage of a critique. In addition, each section may not apply to every reviewed event.

Detection

- Was the spill detected promptly?
- How was it detected?
- By whom?
- Could it have been detected earlier? How?
- Are any instruments or procedures available to consider which might aid in spill detection?

Notification

- Were proper procedures followed in notifying government agencies?
- Were notifications prompt?
- Was management notified promptly?
- Was management response appropriate?

Assessment/Evaluation

- Was the magnitude of the problem assessed correctly at the start?
- What means were used for this assessment?
- Are any guides or aids needed to assist spill evaluation?
- What sources of information were available on winds and on water currents?
- Was the information adequate?
- Was this information useful (and used) for spill trajectory forecasts? Were such forecasts realistic?
- Do we have adequate information on the spilled/released material's properties?
- Do we need additional information on changes of the spilled/released material's properties with time (i.e., as a result of weathering and other processes)?

[105] 40 CFR Part 112 Appendix F 1.7; 33 CFR §154.1035(d)

Mobilization

- What steps were taken to mobilize spill countermeasures?
- What resources were used?
- Was mobilization prompt?
- Could or should mobilization have occurred more quickly?
- What about the mobilization timeliness for manpower resources?
- Was the local spill cooperative used appropriately?
- How could this be improved?
- Was it appropriate to mobilize facility resources and was this promptly initiated?
- What other installation resources are available and have they been identified and used adequately?

Response Strategy

- Is there an adequate spill response plan for the location?
- Is it flexible enough to address unexpected spill events?
- Does the plan include a clear understanding of local environmental sensitivities?
- What was the initial strategy for response to this spill?
- Is this strategy defined in the spill plan?
- How did the strategy evolve and change during this spill and how were these changes implemented?
- What caused such changes?
- Do improvements need to be made? More training needed?

Response Effectiveness

- Was containment effective and prompt?
- How could it have been improved?
- Should the location or the local cooperative have additional resources for containment?
- Was recovery effective and prompt?
- How could it have been improved?
- Should the location or the local cooperative have additional resources for recovery of spilled/released material?
- Was contaminated equipment disposed promptly and safely?
- Was there adequate in-house product separation, recovery, and disposal?
- How could it have been improved?
- Were adequate outside disposal services available?

Command Structure

- Who was initially in charge of spill response?
- What sort of organization was initially set up?

- How did this change with time? Why?
- What changes would have been useful?
- Was there adequate surveillance?
- Should there be any changes?
- Were communications adequate?
- What improvements are needed (hardware, procedures, etc.)?
- Was support from financial services adequate? Prompt?
- Should there be any changes?
- Is more planning needed?
- Should financial procedures be developed to handle such incidents?

Measurement

- Was there adequate measurement or estimation of the quantity of product spilled/released?
- Was there adequate measurement or estimation of the quantity of product recovered?
- Was there adequate measurement or estimation of the quantity of product disposed of?
- Should better measurement procedures be developed for either phase of operations?
- If so, what would be appropriate and acceptable?

Government Relations

- What are the roles and effects of the various government agencies that were involved?
- Was there a single focal point among the government agencies for contact?
- Should there have been better focus of communications to the agencies?
- Were government agencies adequately informed at all stages?
- Were too many agencies involved?
- Are there changes needed in procedures to manage government relations? Examples of affected U.S. agencies (there may be others):
  - USCG
  - USEPA
  - National Oceanographic Atmospheric Administration
  - U.S. Dept. of Fish and Wildlife
  - State Parks
  - Harbors and Marinas
  - States
  - Cities
  - Counties
- Was there adequate agreement with the government agencies on disposal methods?
- Was there adequate agreement with the government agencies on criteria for cleanup?
- How was this agreement developed?

- Were we too agreeable with the agencies in accepting their requests for specific action items (e.g., degree of cleanup)?
- Should there be advance planning of criteria for cleanup, aimed at specific local environmentally sensitive areas? (Such criteria should probably also be designed for different types or products.)

Public Relations

- How were relations with the media handled?
- What problems were encountered?
- Are improvements needed?
- How could public outcry have been reduced? Was it serious?
- Would it be useful to undertake a public information effort to "educate" reporters about the effects of an oil spill release?
- These areas should be investigated shortly after the incident to assure that actions taken are fresh in peoples' minds.

6.2 Amending the Plan by the Regional Administrator[106]

This ICP must be submitted to the USEPA Region 3 Regional Administrator and the VDEQ along with the other information specified in 40 CFR §112.4 if the facility has:

- Discharged more than 1,000 U.S. gallons of oil in a single discharge into or upon the navigable waters of the United States or adjoining shorelines; or
- A discharge of more than 42 U.S. gallons of oil in each of two discharges into or upon the navigable waters of the United States or adjoining shorelines occurring within any 12-month period.

Within 60 days of the occurrence of either of these two conditions, JBLE-Eustis must submit to the USEPA Regional Administrator (Region 3, 1650 Arch Street, Philadelphia, PA), the following:

- Name of the facility,
- Name of the owner or operator of the facility,
- Location of the facility,
- Description of the facility,
- Date of initial facility operation,
- Maximum storage or handling capacity of the facility and current normal daily throughput,
- A complete copy of the ICP with any amendments,
- The cause of such spill,
- The corrective actions and/or countermeasures taken,
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence, and
- Other information as the USEPA Regional Administrator may request.

[106] 40 CFR §112.4

The USEPA Regional Administrator may require that the ICP be amended.

6.3 Amending the Plan by Owner/Operator [107]

6.3.1 SPCC Plan Revisions

The SPCC Plan elements of the ICP must be amended within 6 months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility's potential for discharge described in 40 CFR §112.1(b). Such changes include, but are not limited to:

- Commissioning or decommissioning containers;
- Replacement, reconstruction or movement of containers;
- Reconstruction, replacement or installation of piping systems;
- Construction or demolition that might alter secondary containments structures;
- Changes of product or service; or
- Revision of standard operation or maintenance procedures at a facility.

Also, the SPCC Plan elements must be reviewed at least once every 5 years and amended to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event and has been field-proven.

Amendments made under 40 CFR §112.5 must be prepared within 6 months and implemented as soon as possible, but not later than 6 months following preparation of the amendment.

As required by 40 CFR §112.5(a) and (b), the facility must complete a review and evaluation of the SPCC elements of the ICP:

- When there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge,[108] or
- At least once every 5 years[109]

6.3.2 FRP Revisions

This FRP elements of this ICP must be reviewed and updated periodically to reflect changes at the facility.[110] Resubmission of the ICP (or relevant portions) to the USEPA is required within 60 days of a facility change that may affect the response to a worst case discharge, including:

- A change in the facility's configuration that materially alters the information included in the ICP;
- A change in the type of oil handled, stored, or transferred that materially alters the required response resources;
- A material change in capabilities of the OSRO that provides equipment and personnel to respond to discharges of oil;
- A material change in the facility's spill prevention and response equipment or emergency response procedures; and

[107] 40 CFR §112.5
[108] 40 CFR §112.5(a)
[109] 40 CFR §112.5(b)
[110] 40 CFR §112.20(g)(3)

- Any other changes that materially affect the implementation of the ICP.

The relevant portions of the National Oil and Hazardous Substances Pollution Contingency Plan and ACP must be reviewed annually and, if necessary, the ICP must be revised to ensure consistency with these plans.[111]

6.3.3 Response Plan Revisions[112]

The USCG elements of this ICP must be reviewed annually. This review must incorporate any revisions to the ICP, including listings of fish and wildlife and sensitive environments identified in the ACP in effect 6 months prior to plan review.[113] This review must occur within 1 month of the anniversary date of COTP approval of the plan.[114]

Revision(s) to the USCG elements of the ICP must be submitted to the COTP and all other holders of the ICP for information or approval, as appropriate.[115] Along with the revisions, submit a cover letter containing a detailed listing of all revisions to the USCG elements of the ICP.[116] If no revisions are required, indicate the completion of the annual review on the record of changes page (**ICP Section 1.3**).[117]

Regardless of annual updates, the USCG plan elements are valid for a period of up to 5 years.[118] An updated plan must be submitted every 5 years.[119] The 5-year period commences on the date the COTP approves the Plan.[120] All resubmitted response plans must be accompanied by a cover letter containing a detailed listing of all revisions to the Response Plan.[121]

6.4 Notification of Changes

Revisions to the ICP will be transmitted by mail or electronically, if acceptable, to off-site assistance agencies and facilities. On-site personnel will also be provided revisions by means of an internal memorandum.

Revisions and amendments will also be submitted to the USEPA and/or USCG as appropriate (see **Annex 6 Sections 6.3.2 and 6.3.3** above).

Documentation of JBLE-Eustis's review and amendments of this ICP are documented on the list of Plan amendments (demonstrating the history or revisions) provided in **ICP Section 1.3**.

[111] 40 CFR §112.20(g)(2)
[112] 33 CFR §154.1060
[113] 33 CFR §154.1065(a)
[114] 33 CFR §154.1065(a)(1)
[115] 33 CFR §154.1065(a)(2)
[116] 33 CFR §154.1065(a)(2)(i)
[117] 33 CFR §154.1065(a)(2)(ii)
[118] 33 CFR §154.1060(a)
[119] 33 CFR §154.1060(e)
[120] 33 CFR §154.1060(e)(2); 33 CFR 154.1015(c)
[121] 33 CFR §154.1060(e)(3)

Annex 7. Prevention

7.1 Introduction

This Annex provides prevention-based requirements (e.g., maintenance, inspections, containment) that are required in regulations or that have the potential to impact response activities covered in the ICP.

The primary requirements contained in this Annex are contained in the SPCC Plan (**Annex 9**) and the FRP. The SPCC Plan is required under 40 CFR Part 112 (Subparts A, B, and C). The SPCC Plan is located in **Annex 9**. The SPCC Plan is a carefully designed plan, prepared in accordance with good engineering practices and has the full approval of management at a level of authority to commit the necessary resources. The SPCC Plan will be activated as necessary in the event of an oil spill. Main elements of this plan have been incorporated throughout this ICP.

JBLE-Eustis' commitment to the prevention of emergency situations is implemented through the use of personnel training (e.g., Spill and Emergency Response Training, HAZWOPER, or General Awareness Training), SOPs, engineering controls (e.g., secondary containment structures), and planning (e.g., SPCC Plan).

Inspections play an integral role in the installation incident prevention program by means of identifying a structural (e.g., cracks, dents, holes) or operational (e.g., leaks, noises, odors) deficiency prior to resulting in a significant impact (e.g., spill or release). Problems identified during these inspections are evaluated relative to necessary corrective action, at the least by scheduling repairs, and in some cases, by taking equipment out of service.

7.2 Installation Self-Inspection[122]

The Commonwealth of Virginia Oil Contingency Pollution Act has provisions in Chapter 9 VAC 25-91-30 *et seq.* (Facility and Aboveground Storage Tank Regulation) that apply to individual ASTs located within the Commonwealth of Virginia with an aboveground storage capacity greater than 660 gallons of oil (regulated ASTs), unless otherwise specified within VAC 25-91. Exhibit A of the SPCC Plan **(Annex 9)** provides an overview of the VDEQ AST regulation.

The Facility and Aboveground Storage Tank Regulation requires daily and weekly inspections of regulated ASTs. A regulated AST is an individual AST with a storage capacity greater than 660 gallons of petroleum-based product, and not meeting the exemptions listed in the requirement. The operator or a duly authorized representative must conduct a daily visual inspection for each day of normal operation in the areas of the facility where VAC 25-91 applies. The facility person conducting the inspection must document completion of this inspection by making and signing an appropriate notation in the facility records. This visual inspection must include the following:

- A complete walk-through to confirm that no hazardous conditions exist;
- An inspection of ground surface for signs of leakage, spillage, or stained or discolored soil;
- A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured;
- A visual inspection of the exterior tank shell to look for signs of leakage or damage; and
- An evaluation of the condition of the AST and appurtenances.

[122] 40 CFR Part 112 Appendix F 1.6.1, 1.8.1

Comprehensive inspection checklists have been developed for the installation that incorporate aspects of the SPCC regulations. Each checklist is a record of findings, with areas for comments, date, time, and name of inspector. Recorded checklist findings are maintained on site for a minimum of 5 years. Some of these checklists and inspection logs are found in **Annex 5**, others are found in this Annex.

As identified by findings of the inspections, work orders are produced to address the deficiencies. These work orders are given high priority due to the possible environmental impact. Written records of the daily, weekly, and monthly inspections that are performed on ASTs and associated piping and equipment are maintained for at least 5 years by site personnel. The field personnel conducting the inspection signs the inspection forms.

It is the recommendation of USEPA Region 3 that the complete SPCC Plan be included in the ICP to fulfill the regulatory requirements, recognizing that there may be duplication of information in the ICP by including the SPCC Plan. As such, JBLE-Eustis SPCC Plan is included as **Annex 9**.

7.3 Diesel Fuel, Gasoline, Jet A, and Oil Management[123]

Diesel fuel; gasoline; Jet A; new and used hydraulic, engine, and lubricating oils; and AVFO are stored and handled at JBLE-Eustis. Diesel fuel, gasoline, and Jet A are stored in outdoor ASTs. The capacities of these ASTs range from 110 gallons to 30,000 gallons. Diesel fuel and gasoline containers are double-walled or single-walled with secondary containment except for the following:

- Tank 460-6, 300-gallon diesel day tank inside building
- Tank 589-1, 300-gallon diesel fire suppression system tank, inside fire pump room
- Tank 677-1, 250-gallon AFVO container (outside)
- Tank 2115, 190-gallon hydraulic oil chamber (inside, for elevator)
- Tank 662-2, 130-gallon hydraulic oil chamber (inside, for elevator)

In addition, drums (55-gallons) of oil (new and used) are provided with secondary containment.

Underground storage tanks (USTs) are located at JBLE-Eustis. The SPCC Plan does not address fuel stored in the USTs that are not exempt from the requirements under 40 CFR §280.12(b).

In general, JBLE-Eustis' potential to discharge oil is minimized or controlled by the following:

- Regularly scheduled inspections (daily, weekly and monthly),
- Secondary containment,
- Storage inside buildings,
- Annual AST management and spill response training provided to oil-handling personnel,
- Unloading of tank trucks and oil transfers conducted in accordance with the procedures identified within 40 CFR §112.7(h) and SOPs.

7.4 Secondary Containment[124]

The **Exhibit D of the SPCC Plan (Annex 9)** presents an inventory of oil storage containers and oil storage areas and associated containment at JBLE-Eustis.

[123] 40 CFR Part 112 Appendix F 1.4.2
[124] 40 CFR Part 112 Appendix F 1.4.2

Double-walled tanks are provided with sufficient volume to contain the capacity of the primary tank. Secondary containment capacities for single-walled tanks are shown in **Table A7-1**. **Annex 1 Attachment 1C** identifies the secondary containment capacity for the aboveground tanks at JBLE-Eustis.

Table A7-1. Secondary Containment Capacity for Single-Walled Tanks

Tank No.	Contents	Tank Capacity	Containment Capacity (gallons)	Containment Method
460-6	Diesel Fuel	300	Unknown	Contained within building
589-1	Diesel Fuel	300	0	None
677-1	AFVO	250	0	None
2115-1	Hydraulic Oil	190	0	None
662-2	Hydraulic Oil	130	0	None
3941-2	Diesel Fuel	112	120	Spill pallet

7.5 Inspection, Tests and Records[125]

JBLE-Eustis uses the SPCC rule requirements when developing guidelines for inspection and/or testing of storage oil storage tanks or drums and spill containment structures.

JBLE-Eustis will perform various inspections IAW the SPCC Plan. Formal AST and drum storage inspections will be conducted by on site personnel on a monthly basis for ASTs with a storage capacity of 660 gallons or less. This is to satisfy the Virginia AST Regulation (9VAC 25-91-30, *et seq*). Daily and weekly inspections will be performed for ASTs with oil storage capacities greater than 660 gallons. Records of these inspections are documented and initialed by the inspector. During these inspections, the drums, ASTs, containment structures, and other appropriate equipment are inspected. **Attachment 7A** provides copies of blank AST inspection checklists.

7.6 Testing and Records[126]

The SPCC rule allows for an "equivalent environmental inspection" in place of integrity testing for aboveground storage containers. JBLE-Eustis will use this approach for its POL ASTs and 55-gallon drums. As such, JBLE-Eustis will perform visual inspections (described above) in lieu of the performance of integrity inspections for ASTs and containers where all sides are visible.

Although the bottoms of the 55-gallon drums are not directly visible, the containers are located on containment pallets or within secondary containment areas, whereby the presence or absence of product may be noted visually. AST bottoms are either visible or located on an impervious surface.

Identified deficiencies that are observed during the various above-referenced inspections are addressed promptly by JBLE-Eustis personnel.

ICP recordkeeping involves maintaining log sheets (or equivalent) concerning the inspection of drums/storage tanks and spill containment structures.

[125] 40 CFR Part 112 Appendix F 1.6.1, 1.8.1
[126] 40 CFR Part 112 Appendix F 1.8.1

The records of inspections are maintained on checklists (included in **Attachment 7A** and in **Appendix G of the SPCC Plan**). Each of the log sheets contains pertinent information concerning the dates of the inspection, the inspector, items checked, and problem areas discovered. The Tanks Program Manager (or a designee) is responsible for completing the inspections and the inspection log sheet. The completed inspection log sheet may be reviewed by the Tanks Program Manager (or a designee) at the completion of the inspection. Inspection records must be maintained on file at each facility for a 5-year period.

7.7 Personnel Training for Discharge Prevention[127]

Spill prevention and response training is included in the initial and annual refresher environmental training required for all personnel who work on base. The training is offered through the TEACH or via in-person training sessions coordinated by the Spill Program Manager. These spill prevention and response procedure-training sessions include information and instructions concerning past spill events/equipment failures, preventive measures, and initial response actions. Training completed via TEACH records the name and date of the trainee. If any in-person training is completed by the Spill Program Manager, written documentation that includes the date, training topics, and personnel attending the training will be completed.

7.8 Security[128]

JBLE-Eustis is fully fenced, and oil storage takes place within the secured areas at the installation. The installation receives 24-hour gate surveillance by the Military Police. Access is available only through entrance gates, with restricted access controls occurring between 2200 and 0500 hours each day.

7.9 Discharges

JBLE-Eustis stormwater effluent discharges are covered under their Virginia Pollution Discharge Elimination System (VPDES) Permit Number VA0025216. This permit expired on 31 August 2020. The installation submitted a permit renewal application and a new permit is expected to be issued in 2021. The installation is operating under an administrative continuation of the former permit until such time the replacement permit is issued.

7.10 Container Management[129]

Materials are stored in containers that are in good condition and without visible defect or conditions that would indicate they may be prone to leak. When feasible, materials will be stored in their original container. Additionally, materials will not be placed in a container that previously contained an incompatible material. Containers will be maintained closed at all times unless material is being placed into or being removed from the container.

In the event a leaking container is discovered, the response procedures contained in the **ICP Section 2** (**Core Plan)** and **Annex 3** will be implemented. Response activities as determined to be appropriate may include: (1) plugging the leak and/or (2) transferring the material to another container.

Visible oil and hazardous material/waste leaks will be reported so that corrective actions can be immediately implemented. Measures will be taken to minimize and mitigate the leak, while awaiting repair. The leaked oil will be cleaned up immediately by the FES or the FRT members.

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[127] 40 CFR Part 112 Appendix F 1.8.3
[128] 40 CFR Part 112 Appendix F 1.10
[129] 40 CFR Part 112 Appendix F 1.4.2

Oil spill/release cleanup supplies are stored at appropriate locations throughout the installation. JBLE-Eustis will maintain an up-to-date inventory log sheet (**Annex 3, Attachment 3C**) of emergency equipment managed and maintained by FES and CES.

7.11 Tank Truck Loading/Unloading[130]

The tank truck loading area at the old Felker Army Airfield Fuel Terminal is periodically used to fill the Jet A storage tanks from a supplier's tank truck. This area is also used to transfer Jet A into the mobile refuelers used on the installation.

The new Felker Army Airfield Fuel Terminal (under construction in 2021) is designed with separate tank truck unloading and loading areas within the terminal area. The new TVRP (under construction in 2021) is also designed with a tank truck unloading area separate from the dispenser area.

SOPs are used for the offloading and loading activities. These tank truck offloading and loading procedures can be found in the **SPCC Plan** (**Annex 9**). Piping diagrams for the new Fuel Terminal and TVRP fuel systems are located in **Annex 3 Attachment 3D**.

[130] 40 CFR Part 112 Appendix F 1.4.2

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ATTACHMENT 7A
AST INSPECTION FORMS

- Monthly Inspection Checklist - Shop Fabricated and Organizational Tanks (AFI 32-7044) [131]
- Annual Inspection Checklist - Shop Fabricated and Organizational Tanks (AFI 32-7044) [132]

[131] 40 CFR Part 112 Appendix F 1.8.1.1
[132] 40 CFR Part 112 Appendix F 1.8.1.1

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MONTHLY INSPECTION CHECKLIST				
SHOP FABRICATED AND ORGANIZATIONAL TANKS (AFI 32-7044)				
*This checklist is to be competed **monthly** to comply with 40 CFR 112.8 requirements and AFI 32-7044 for periodic inspections of Shop Fabricated ASTs and Organizational ASTs.*				
Tank ID No.:		Inspector's Name:		
Tank Location:		Organization:		
Type Fuel Stored:		Inspector's Duty Phone:		
Tank Capacity (gallons):		Date of Inspection:		
No	**ITEM**	**YES**	**NO**	**N/A**
1	**Tank Containment** Inspect secondary containments. Are there water accumulations, debris, vegetation, cracks, fire hazards or holes? Are containment drain valves in working order and closed?			
2	For double wall tanks, is there water or fuel in the tank interstice space? (If water is detected, arrange to have water removed and disposed in accordance with local, state and federal environmental regulation.) If fuel is detected, contact CES CEIE office (Ref 40 CFR 112.8 (d)(4))			
3	Are there leaks, broken seals and/or corrosion of manhole covers? (Ref: 40 CFR 112.8 d 4)			
4	Are there any indications of leakage, staining, or seepage around tank shell, concrete pad? (Ref: 40 CFR 112.8 (d)(4))			
5	Are there any indications of leakage, staining, seepage or severe corrosion on: --piping, pipe connections, pipe stands --valves --tank supports/saddles (Ref: 40 CFR 112.8 (d) (4))			
6	Is tank level gage working, readable and can be observed by operator from the fill position location?			
7	Are ladders, platforms, handrails, stairs secure with no indication of severe corrosion and /or damage? (Ref: 40 CFR 112.8 (d)(4))			
8	Are containment egresses (exits) pathways clear? Are gates/doors operable and in working order? (Ref: 40 CFR 112.8 (d)(4))			
9	Are fire extinguishers maintained in a serviceable condition and located in the designated area? (Ref: T.O. 37-1-1, para 2.2a; 3.12.f.1)			
10	Any deficiency found has been addressed/corrected or has been submitted to CE via AF Form 332 process?			
Inspector signature:		**Date:**		

ANNUAL INSPECTION CHECKLIST

SHOP FABRICATED AND ORGANIZATIONAL TANKS (AFI 32-7044)

*This checklist is to be completed **annually** to comply with 40 CFR 112.8 requirements and AFI 32-7044 for periodic inspections of Shop Fabricated ASTs and Organizational ASTs.*

Tank No.		Inspector Name	
Tank Location		Organization	
Type Fuel Stored		Inspector Duty Phone	
Tank Capacity (gallons)		Date of Inspection	

No	ITEM	YES	NO	N/A
1	**Tank Containment** Inspect secondary containments. Are there water accumulations, debris, vegetation, cracks, fire hazards or holes? Are containment drain valves in working order and closed?			
2	**Tank Foundation and Supports** Is there evidence of tank settlement, foundation washout, or foundation cracking? Is there any cracking, spalling or severe corrosion of tank supports and/or saddles? Are ladders, platforms, handrails, stairs secure with no indication of severe corrosion and/or damage?			
3	**Tank and Appurtenances** Is the Normal Vent clear and free of obstructions? Is vent located five feet or more from adjacent buildings? For class I fuels (i.e. MOGAS, AVGAS), are normal vents located at least 12 feet above grade? Are there emergency vents for the primary tank? Is emergency vent operable (vent cover can be lifted by hand)? Are there emergency vents for the secondary tank if a double wall tank? Is emergency vent operable (vent cover can be lifted by hand)? Are all valves in working order?			
4	**Corrosion Control** Is there evidence of paint coating failure or severe corrosion of tank and piping surfaces? Is there evidence of corrosion at pipestand and piping interfaces (undercutting of pipe) including underside of piping? Is there cathodic protection for underground metallic piping? Is cathodic protection working and being checked regularly?			

ANNUAL INSPECTION CHECKLIST (Continued)				
SHOP FABRICATED AND ORGANIZATIONAL TANKS (AFI 32-7044)				
No	**ITEM**	**YES**	**NO**	**N/A**
5	**Level and Overfill Prevention** Has the tank level indicating device been tested and is in working order? Is tank level gage viewable from the filling point? Has the overflow shutoff mechanism (shut off valve or flat valve) been tested and is in working order? Is the High Level Alarm present and in working order? Are anti-siphon valves operable (if present)?			
6	**Electrical Wiring and Equipment** Is tank grounded? Are grounding straps securer and in good order? Are wiring, wiring conduit, junction boxes in good conditions? Are electrical components in classified conduit and enclosures as required?			
7	**Tank Site** Are traffic bollards and/or protection from vehicle traffic in place where required?			
8	**Any other items of note:**			
9	Address/correct any found deficiencies or submit AF Form 332 for further action.			
Inspector signature:		**Date:**		

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Annex 8. Regulatory Compliance and Regulations Cross-References Matrices

This Annex provides reviewers information to evaluate compliance with specific regulatory requirements. Section 1.3 of the ICP addressed the applicability of emergency response planning regulations. The following tables contain cross-references that indicate where specific regulatory requirements for the FRP required by 40 CFR Part 112 and for the Response Plan required by 33 CFR Part 154 Subpart F are addressed in the ICP.

8.1 Cross Reference Index – USEPA FRP (40 CFR Appendix F of 40 CFR Part 112)

Table A8-1. Facility Response Plan Cross Reference Index (Appendix F of 40 CFR §112.21)

FRP Element	Location in Plan
Response Plan Cover Sheet	Response Plan Cover Sheet
General Information (sec 2.0)	
• Facility Name	
• Facility Address	
• Facility Telephone	
• Mailing Address (if different from Facility Address)	
• Facility Owner & Address **(recommended)**	
• Facility Owner Telephone **(recommended)**	
• Dun & Bradstreet Number	
• Longitude (degrees, minutes, seconds)	
• Latitude (degree, minutes, seconds)	
• North American Industrial Classification System (NAICS)	
• Facility Start Up Date **(recommended)**	
• Facility Acres **(recommended)**	
• Name of Protected Waterway or Environmentally Sensitive Area	
• Distance to Navigable Water	
• Worst Case Discharge Amount (gallons)	
• Maximum Oil Storage Capacity (gallons)	
• Largest AST Capacity (gallons)	
• Total Number of ASTs	
• Total Number of USTs	
• Total UST Storage	
• Total Storage of Drums and Transformers that contain Oil	
• Number of Surface Impoundments and Total Storage of Surface Impoundments	
Applicability of Substantial Harm Criteria (sec.2.2)	Annex 3 Att. 3E
Certification (sec. 2.3)	Annex 3 Att. 3E
Emergency Response Action Plan (ERAP) (sec. 1.1)	
• Separate Section of FRP	See the separate ERAP
• Qualified Individual (QI) Information (sec. 1.2)	ERAP Sec. 1
• Emergency Notification List (sec. 1.3.1)	ERAP Sec. 2
• Spill Response Notification Form (sec. 1.3.1)	ERAP Sec. 3
• Response Equipment List and Location (sec. 1.3.2)	ERAP Sec. 4
• Response Equipment Testing and Deployment (sec. 1.3.3)	ERAP Sec. 5
• Facility Response Team List (sec. 1.3.4)	ERAP Sec. 6
• Evacuation Plan (sec. 1.3.5)	ERAP Secs. 7, 9
• Immediate Actions (sec. 1.7.1)	ERAP Sec. 8

FRP Element	Location in Plan
• Facility Diagrams (sec. 1.9)	ERAP Sec. 9
Facility Information (sec. 1.2)	Sec. 1.4
• Facility name (sec. 1.2.1)	Sec. 1.4
• Street address	Sec. 1.4
• City, state, zip code	Sec. 1.4
• County	Not applicable
• Phone number	Sec. 1.4
• Latitude/longitude (sec. 1.2.2)	Sec. 1.4
• Wellhead protection area (sec. 1.2.3)	Annex 1 (Att. 1A Map 4), Annex 3 (3.4.2.12)
• Owner/operator (both names included, if different) (sec. 1.2.4)	Sec. 1.4
• QI Information (sec. 1.2.5) (Name, position, street address, phone numbers)	Sec. 1.4, Annex 3 (3.2.1.2)
Description of specific response training experience	Sec. 5.1
• Oil storage start-up date (sec. 1.2.6)	Sec. 1.4, Annex 1 (1.2.2)
• Facility operations description (sec. 1.2.7)	Sec. 1.5, Annex 1 (1.2.1)
• North American Industrial Classification System (NAICS) or Standard Industrial Classification code (SIC)	Sec. 1.4, Table 1-2
• Dates and types of substantial expansion (sec. 1.2.8)	Annex 1 (1.2.2)
Emergency Response Information (sec. 1.3)	
Notification (sec. 1.3.1)	
• **Emergency Notification Phone List**	Sec. 2.2.1.1, Sec. 2.2.1.2
– National Response Center phone number	Sec. 2.2.1.2, Annex 2 (2.3.1, 2.3.2)
– QI (day and evening) phone numbers	Sec. 1.4, Sec. 2.2.1.1, Annex 2 (2.1), Annex 3 (3.2.1.2)
– Company response team (day and evening) phone numbers	Sec. 2.2.1.1, Annex 2 (2.1)
– Federal On-Scene Coordinator (OSC) and/or regional response center (day and evening) phone numbers	Sec. 2.2.1.2, Annex 2 (2.3)
– Local response team phone numbers	Sec.2.2.1.2, Annex 2 (2.1)
– Fire marshal (day and evening) phone numbers	Sec. 2.2.1.2, Annex 2 (2.2)
– State emergency response phone number(s)	Annex 2 (2.3)
– State police phone number	Annex 2 (2.3)
– SERC and LEPC phone number	Annex 2 (2.3)
– Wastewater treatment facility(s) name and phone number (**recommended**)	Annex 2 (2.2, 2.3.1)
– Local water supply system (day and evening) phone numbers	Annex 2 (2.2, 2.3.1)
– Weather report phone number	Annex 2 (2.3.1)
– Local TV/radio phone number(s) for evacuation notification	Sec. 2.2.1.1, Annex 3 (3.2.2.1)
– Spill response contractor(s)	Sec. 2.2.1.2, Annex 2 (2.3.1), Annex 3 (Att. 3I)
– Factories/Utilities with water intakes (**recommended**)	Not applicable
– Trustees of sensitive areas (**recommended**)	Annex 2 (2.2)
– Hospital phone number	Sec. 2.2.1.2 Annex 2 (2.3.1)
• **Spill Response Notification Form** - (Reporter's Name, Position, Phone Number, Company Information, Were Materials Discharged, Meeting Federal Obligations to report, Calling for Responsible Party, Time Called, Incident Description (source/cause),	App. B

FRP Element	Location in Plan
Date/Time of Incident, Incident Address/Location, Nearest City/State/County/Zip, Distance from City/Units of Measure/Direction from City, Section, Township, Range, Borough, Container Type/Tank Oil Storage Capacity/	App. B
Units of Measure, Facility Oil Storage Capacity/Units of Measure, Facility Longitude and Latitude)	App. B
Response Equipment List (Sec. 1.3.2)	
• Skimmers/Pumps (Operational Status, Type/Model/Year, Number or Quantity, Capacity, Daily effective Recovery Rate, Storage Location)	Annex 3 (Att. 3C)
• Boom (Containment Boom: Operational Status, Year, Number, Skirt Size. Sorbent Boom: Operational Status, Type/Model/Year, Number, Size (Length))	Annex 3 (Att. 3C)
• Chemical Countermeasures Agents Stored	Annex 3 (Att. 3C)
• Sorbents (Type, Year Purchased, Amount, Storage Location)	Annex 3 (Att. 3C)
• Hand Tools (Type, Quantity, Storage Location)	Annex 3 (Att. 3C)
• Communication Equipment (Operational Status, Type, Operational Frequency, Quantity)	Annex 3 (Att. 3C)
• Fire Fighting and Personnel Protective Equipment	Annex 3 (Att. 3C)
• Boats and Motors (Operational Status, Type, and Year, Quantity, Storage Location)	Annex 3 (Att. 3C)
• Other (e.g., Heavy Equipment, Cranes, Dozers etc.,) (Operational Status, Type, and Year, Quantity, Storage Location)	Annex 3 (Att. 3C)
• Equipment Location	Annex 3 (Att. 3C)
• Amount of oil that emergency response equipment can handle and limitations (e.g., launching sites) must be described.	Annex 3 (Att. 3C)
Response Equipment Testing and Deployment Drill Log (sec. 1.3.3)	Annex 5 (Att. 5A)
• Date of Last Inspection or Equipment Test	Annex 5 (Att. 5A)
• Inspection Frequency	Annex 5 (Att. 5A)
• Date of Last Deployment	Annex 5 (Att. 5A)
• Deployment Frequency	Annex 5 (Att. 5A)
• OSRO Certification	Not applicable
Personnel (sec. 1.3.4)	
• **Emergency Response Personnel Information** (Personnel whose duties involve responding to emergencies, including oil discharges, even when they are not present at the site)	
– Name	Sec. 2.2.1, Annex 2 (2.1)
– Phone numbers (work/home, other)	Sec. 2.2.1, Annex 2 (2.1)
– Response time	Sec. 2.2.1, Annex 2 (2.1)
– Responsibility	Annex 3 (3.2.1)
– Type and date of response training	Annex 5 (5.3)
• **Emergency Response Contractor Information**	
– Names	Sec. 2.2.1.2, Sec. 2.2.2, Annex 2 (2.3.1), Annex 3 (Att. 3I)
– Phone numbers	Sec. 2.2.1.2, Sec. 2.2.2, Annex 2 (2.3.1), Annex 3 (Att. 3I)
– Response time	Annex 3 (3.2.4, Atts. 3F and 3I)
– Evidence of contractual arrangements	Annex 3 (Att. 3I)
• **Facility Response Team Information (Composed of Emergency Response Personnel and Emergency Response that will respond immediately)**	
– Name	Sec. 2.2.1.1, Annex 2 (2.1)

FRP Element	Location in Plan
– Job function of emergency response personnel	Annex 3 (3.2.1)
– Response time	Annex 3 (3.2.4)
– Phone/pager	Sec. 2.2.1.1, Annex 2 (2.1)
– **Name of emergency response contractor** (Contractors providing facility response team services may be different that contractors providing oil spill response services)	Sec. 2.2.1.2, Sec. 2.2.2, Annex 2 (2.3.1), Annex 3 (Att. 3I)
– Response time	Sec. 2.2.1.2, Sec. 2.2.2, Annex 2 (2.3.1), Annex 3 (Att. 3I)
– Phone/pager	Annex 3 (3.2.4, Atts. 3F and 3I)
Evacuation Plans (sec. 1.3.5)	
• **Facility Evacuation Plan (sec. 1.3.5.1)**	Annex 3 (Att. 3B)
– Location of stored materials	Annex 1 (Att. 1C)
– Hazard imposed by spilled materials	Annex 3 (3.4.1)
– Spill flow direction	Annex 3 (Att. 3H)
– Prevailing wind directions and speed	Annex 3 (Att. 3B)
– Water currents, tides, or wave conditions (if applicable)	Annex 3 (Att. 3B)
– Arrival route of emergency response personnel and response equipment	Annex 3 (Att. 3B)
– Evacuation routes	Annex 3 (Att. 3B)
– Alternative routes of evacuation	Annex 3 (Att. 3B)
– Transportation of injured personnel to nearest emergency medical facility	Annex 3 (Att. 3B)
– Location of alarm/notification systems	Annex 3 (Att. 3B)
– Centralized check-in area for roll call	Annex 3 (Att. 3B)
– Mitigation command center location	Annex 3 (Att. 3B)
– Location of shelter at facility	Annex 3 (Att. 3B)
• **Community Evacuation Plans referenced (sec. 1.3.5.3)**	Annex 3 (Att. 3B)
Description of Qualified Individual's Duties (sec. 1.3.6)	Annex 3 (3.2.1.2)
• Activate internal alarms and hazard communication systems	Annex 3 (3.2.1.2)
• Notify Response Personnel	Annex 3 (3.2.1.2)
• Identify character, exact source, amount, and extent of the release	Annex 3 (3.2.1.2)
• Notify and provide information to appropriate Federal, State and local authorities	Annex 3 (3.2.1.2)
• Assess interaction of spilled substance with water and/or other substances stored at facility and notify on-scene response personnel of assessment	Annex 3 (3.2.1.2)
• Assess possible hazards to human health and the environment	Annex 3 (3.2.1.2)
• Assess and implement prompt removal actions	Annex 3 (3.2.1.2)
• Coordinate rescue and response actions	Annex 3 (3.2.1.2)
• Access company funding to initiate cleanup activities	Annex 3 (3.2.1.2)
• Direct cleanup activities	Annex 3 (3.2.1.2)
Hazard Evaluation (sec. 1.4)	
Hazard Identification (sec. 1.4.1)	
• Tank Above Ground and Below Ground	
Tanks	Annex 1 (Att. 1C), Annex 3 (Att. 3H)
– Tank Number(s)	Annex 1 (Att. 1C), Annex 3 (Att. 3H)
– Substance(s) Stored	Annex 1 (Att. 1C), Annex 3 (Att. 3H)
– Quantity(s) Stored	Annex 1 (Att. 1C), Annex 3 (Att. 3H)

FRP Element	Location in Plan
– Tank Type(s)/Year(s) of construction	Annex 1 (Att. 1C)
– Shell Capacity(s)	Annex 1 (Att. 1C), Annex 3 (Att. 3H)
– Failure(s)/Cause(s)	Annex 3 (Att. 3H)
• Surface Impoundments (SI)	Not applicable
• Labeled schematic drawing	Annex 3 (3.4.1, Att. 3D)
• Description of transfers (loading and unloading) and volume of material	Annex 1 (1.4.1), Annex 7 (7.11)
• Description of daily operations	Annex 1 (1.4.1), Annex 7 (7.3, 7.10)
• Secondary containment volume(s)	Annex 1 (1.4.1), Att. 1C), Annex 7 (7.4)
• Normal daily throughput of the facility	Annex 3 (3.4.3.2, 3.4.3.3)
Vulnerability Analysis (sec. 1.4.2) (See Appendix C - Calculation of the Planning Distance)	Annex 3 (Att. 3F)
• **Analysis of potential effects of an oil spill on vulnerable areas.**	Annex 3 (3.4.2)
– Water intakes (drinking, cooling or other)	Annex 3 (3.4.2.12)
– Schools	Annex 3 (3.4.2.11)
– Medical facilities	Annex 3 (3.4.2.5)
– Residential areas	Annex 3 (3.4.2.5)
– Businesses	Annex 3 (3.4.2.5)
– Wetlands or other sensitive environments	Annex 3 (3.4.2.6)
– Fish and wildlife	Annex 3 (3.4.2.7)
– Lakes and streams	Annex 3 (3.4.2.6, 3.4.2.10)
– Endangered flora and fauna	Annex 3 (3.4.2.8), Annex 3 Attachment 3K
– Recreational areas	Annex 3 (3.4.2.10)
– Transportation routes (air, land, and water)	Annex 3 (3.4.2.13)
– Utilities	Annex 3 (3.4.2.14)
– Other applicable areas	Annex 3 (3.4.3), Annex 3 Attachment 3L
Analysis of the Potential for an Oil Spill (sec. 1.4.3)	
• Description of likelihood of release occurring	
– Oil spill history for the life of the facility	Annex 4 (4.2)
– Horizontal range of potential spill	Annex 3 (3.4.2.1)
– Vulnerability to natural disaster	Annex 3 (3.4.2.2)
– Tank age	Annex 3 (3.4.2.3)
– Other factors (e.g., unstable soils, earthquake zones, Karst topography, etc.)	Annex 3 (3.4.3)
Facility Reportable Oil Spill History Description (sec. 1.4.4)	Annex 4 (4.2)
• Date of discharge(s)	
• List of discharge causes	
• Material(s) discharged	
• Amount of discharges in gallons	
• Amount that reached navigable waters (if applicable)	
• Effectiveness and capacity of secondary containment	
• Clean-up actions taken	
• Steps taken to reduce possibility of reoccurrence	
• Total oil storage capacity of tank(s) or impoundment(s) from which material discharged	
• Enforcement actions	
• Effectiveness of monitoring equipment	

FRP Element	Location in Plan
• Spill detection	
Discharge Scenarios (sec. 1.5)	
Small Discharges (sec. 1.5.1) (Description of small discharges addressing facility operations and components including but not limited to: (see. 1.5.1.1)	Annex 3 (3.4.3.4)
• Loading and unloading operations	Annex 3 (3.4.3.4)
• Facility Maintenance Operation	Annex 3 (3.4.3.4)
• Facility Piping	Annex 3 (3.4.3.4)
• Pumping stations and sumps	Annex 3 (3.4.3.4)
• Oil storage location	Annex 3 (3.4.3.4)
• Vehicle refueling operations	Annex 3 (3.4.3.4)
• Age and condition of facility components	Annex 3 (3.4.3.4)
• Small volume discharge calculation for a facility	Annex 3 (3.4.3.4)
• Facility-specific Small spill scenario that reaches a waterway	Annex 3 (3.4.3.4, Att. 3F)
• Average most probable discharge for complexes	Annex 3 (3.4.3.4)
• 1,000 feet of boom (1 hour deployment time)	Annex 3 (3.3.2, Att. 3F)
• Correct amount of boom for complexes	Annex 3 (3.3.2, Att. 3F)
• Oil recovery devices equal to small discharge (2 hour recovery time)	Annex 3 (3.4.3.4)
• Oil storage capacity for recovered material	Annex 3 (3.4.3.4)
Scenarios Affected by the Response Efforts (sec. 1.5.1.2)	
• Size of the discharge	Annex 3 (3.4.3.4)
• Proximity to downgradient wells, waterways, and drinking water intakes	Annex 3 (3.4.2.12, 3.4.3.4)
• Proximity to fish and wildlife and sensitive environments	Annex 3 (3.4.2.7, 3.4.3.4)
• Likelihood that the discharge will travel offsite (i.e., topography, drainage)	Annex 3 (3.4.3.4)
• Location of the material discharged (i.e., on a concrete pad or directly on the soil)	Annex 3 (3.4.3.4)
• Material discharged	Annex 3 (3.4.3.4)
• Weather or aquatic conditions (i.e., river flow)	Annex 3 (3.4.3.4)
• Available remediation equipment	Annex 3 (3.4.3.4)
• Probability of a chain reaction of failures	Annex 3 (3.4.3.4)
• Direction of discharge pathway	Annex 1 (Att. 1C), Annex 3 (Att. 3H)
Medium Discharges (sec. 1.5.1) (Description of medium discharges scenarios addressing facility operations and components including but not limited to: (sec. 1.5.1.1)	
• Loading and unloading operations	Annex 3 (3.4.3.3)
• Facility Maintenance Operation	Annex 3 (3.4.3.3)
• Facility Piping	Annex 3 (3.4.3.3)
• Pumping stations and sumps	Annex 3 (3.4.3.3)
• Oil storage location	Annex 3 (3.4.3.3)
• Vehicle refueling operations	Annex 3 (3.4.3.3)
• Age and condition of facility components	Annex 3 (3.4.3.3)
• Medium volume discharge calculation for a facility	Annex 3 (3.4.3.3)
• Facility-specific Medium spill scenario that reaches a waterway	Annex 3 (3.4.3.3)
• Maximum most probably discharge for complexes	Annex 3 (3.4.3.3)
• Oil recovery devices equal to medium discharge	Annex 3 (3.4.3.3)
• Availability of sufficient quantity of boom	Annex 3 (3.4.3.3)
• Oil storage capacity for recovered material	Annex 3 (3.4.3.3)
Scenarios Affected by the Response Efforts (sec. 1.5.1.2)	Annex 3 (3.4.3.3)
• Size of the discharge	Annex 3 (3.4.3.3)

FRP Element	Location in Plan
• Proximity to downgradient wells, waterways, and drinking water intakes	Annex 3 (3.4.3.3)
• Proximity to fish and wildlife and sensitive environments	Annex 3 (3.4.3.3)
• Likelihood that the discharge will travel offsite (i.e., topography, drainage)	Annex 3 (3.4.3.3)
• Location of the material discharged (i.e., on a concrete pad or directly on the soil)	Annex 3 (3.4.3.3)
• Material discharged	Annex 3 (3.4.3.3)
• Weather or aquatic conditions (i.e., river flow)	Annex 3 (3.4.3.3)
• Available remediation equipment	Annex 3 (3.4.3.3)
• Probability of a chain reaction of failures	Annex 3 (3.4.3.3)
• Direction of discharge pathway	Annex 3 (3.4.3.3)
Worst Case Discharge (sec. 1.5.2) See Appendix D	
• Facility Specific Worst Case Discharge Scenario that reaches a waterway	
Description of worst case discharges scenarios addressing facility operations and components including but not limited to: (sec. 1.5.1.1)	
• Loading and unloading operations	Annex 3 (3.4.3.2)
• Facility Maintenance Operation	Annex 3 (3.4.3.2)
• Facility Piping	Annex 3 (3.4.3.2)
• Pumping stations and sumps	Annex 3 (3.4.3.2)
• Oil storage location	Annex 3 (3.4.3.2)
• Vehicle refueling operations	Annex 3 (3.4.3.2)
• Age and condition of facility components	Annex 3 (3.4.3.2)
• Correct Worst Case Discharge (WCD) calculation for specific type of facility (Appendix D)	Annex 3 (Att. 3F)
• Correct WCD calculation for complexes	Annex 3 (Att. 3F)
• Sufficient response resources for WCD **(Appendix E)**	Annex 3 (Att. 3F)
• Sources and quantity of equipment for response to WCD	Annex 3 (Atts. 3C, 3I)
• Oil storage capacity for recovered material	Annex 3 (Atts. 3C, 3I)
Scenarios Affected by the Response Efforts (sec. 1.5.1.2)	Annex 3 (3.4.3.2)
• Size of the discharge	Annex 3 (3.4.3.2)
• Proximity to downgradient wells, waterways, and drinking water intakes	Annex 3 (3.4.3.2)
• Proximity to fish and wildlife and sensitive environments	Annex 3 (3.4.3.2)
• Likelihood that the discharge will travel offsite (i.e., topography, drainage)	Annex 3 (3.4.3.2)
• Location of the material discharged (i.e., on a concrete pad or directly on the soil)	Annex 3 (3.4.3.2)
• Material discharged	Annex 3 (3.4.3.2)
• Weather or aquatic conditions (i.e., river flow)	Annex 3 (3.4.3.2)
• Available remediation equipment	Annex 3 (3.4.3.2)
• Probability of a chain reaction of failures	Annex 3 (3.4.3.2)
• Direction of discharge pathway	Annex 3 (3.4.3.2)
Discharge Detection Systems (sec. 1.6)	
Discharge Detection by Personnel (sec. 1.6.1)	Annex 3 (3.5)
• Description of procedures and personnel for spill detection	Annex 3 (3.5)
• Description of facility inspections	Annex 3 (3.5), Annex 7 (7.2, 7.5, Att. 7A)
• Description of initial response actions	Sec. 2.2
• Emergency Response Information (referenced)	Annex 3 (3.5)
Automated Discharge Detection (sec. 1.6.2) ***(See Section II, 112.7(e)(5)(iii)(D), 112.7(e)(2)(viii), 112.7(e)(7)(v))***	
• Description of automatic spill detection equipment, including overfill alarms and secondary containment sensors	Annex 3 (3.5)

FRP Element	Location in Plan
• Description of alarm verification procedures and subsequent actions	Annex 3 (3.5)
Plan Implementation (sec. 1.7)	
• Procedures that the facility will use to update the plan after an oil discharge event and the time frame to update the Plan (sec. 1.7)	Annex 4 (4.1), Annex 6
• Identification of response resources for small, medium, and worst case spills (sec. 1.7.1)	Annex 3 (3.4.3.2, 3.4.3.3, 3.4.3.4, Att. 3C)
• Description of response actions	Annex 3 Att. 3J
– Emergency plans for spill response	Sec. 2.2, 2.3 Annex 3 (3.3)
– Additional response training	Annex 5
– Additional contracted help	Annex 3 (3.2.1.2, 3.2.1.10, Att. 3I)
– Access to additional response equipment/experts	Annex 3 (3.2.1.2, 3.2.1.10)
– Ability to implement plan, including response training and practice drills	Annex 5
• **Recommended form detailing Immediate Action for Small, Medium and Worst Case spills (sec. 1.7.1.2A)**	Sec. 2.1
Disposal Plan (sec. 1.7.2)	
• Description of procedures for recovering, reusing, decontaminating or disposing of materials	Annex 3 (3.5.2)
• Materials addressed in Disposal Plan (Recovered product, contaminated soil, contaminated equipment and materials (including drums tank parts, valves and shovels), personnel protective equipment, decontamination solutions, absorbents, spent chemicals)	Annex 3 (3.5.2)
• Plan prepared in accordance with any Federal, State, and/or local regulations	Annex 3 (3.5.2)
• Plan addresses permits required to transport or dispose of recovered materials	Annex 3 (3.5.2)
Containment and Drainage Planning (sec. 1.7.3) ***(See Section II, 112.7(e)(1), 112.7(e)(7))***	Not applicable
• Description of containing/controlling a spill through drainage.	
– Containment volume	
– Drainage route from oil storage and transfer areas	
– Construction materials in drainage troughs	
– Type and number of valves and separators in drainage system	
– Sump pump capacities	
– Containment capacities of weirs and booms and their location	
– Other clean up materials	
Self-Inspection, Training, and Meeting Logs (sec. 1.8)	
Facility Self-Inspection (sec. 1.8.1)	Annex 7 (7.2)
• Records of tank inspections with dates (Tank Leaks, Tank Foundations, Tank Piping) contained or cross-referenced in plan or maintained electronically for five years (See Section II, 112.7(e)(8))	Annex 7 (7.5, 7.6), Annex 7 Att. 7A
• Records of secondary containment inspections with dates (Dike or Berm System, Secondary Containment, Retention and drainage ponds) contained or cross-referenced in plan or maintained electronically for five years (See Section II, 112.7(e)(8))	Annex 7 (7.2, 7.5, 7.6) Annex 9 (4.2)
• Response Equipment Checklist	Annex 5 (Att. 5A)
• Response Equipment Checklist (sec. 1.8.1.2)	Annex 5 (Att. 5A)
– Inventory (item and quantity)	Annex 5 (Att. 5A)
– Storage location	Annex 5 (Att. 5A)
– Accessibility (time to access and respond)	Annex 5 (Att. 5A)
– Operational status/condition	Annex 5 (Att. 5A)
– Actual use/testing (last test date and frequency of testing)	Annex 5 (Att. 5A)

FRP Element	Location in Plan
– Shelf life (present age, expected replacement date)	Annex 5 (Att. 5A)
– Inspection date	Annex 5 (Att. 5A)
– Inspector's signature	Annex 5 (Att. 5A)
– Inspection Records maintained for 5 years	Annex 5 (5.4)
• **Response Equipment Inspection Log (Inspector, Date, Comments)**	Annex 5 (Att. 5A)
Facility Drills/Exercises (sec. 1.8.2)	
• Description of drill/exercise program based on PREP guidelines or other comparable program	Annex 5
– QI notification drill	Annex 5 (5.2.2)
– Spill management team tabletop exercise	Annex 5 (5.2.3)
– Equipment deployment exercise	Annex 5 (5.2.3.1)
– Unannounced exercise	Annex 5 (5.2.3.2)
– Area exercise	Annex 5 (5.2.4)
• Description of evaluation procedures for drill program	Annex 5 (5.2.2, 5.2.3, 5.2.4)
• **Qualified Individual Notification Drill Log (sec. 1.8.2.1)**	Annex 5 (Att. 5A)
(Date, company, qualified individual, other contacted, emergency scenario, evaluation)	Annex 5 (Att. 5A)
• **Spill Management Team Tabletop Drill Log (sec. 1.8.2.2)**	Annex 5 (Att. 5A)
(Date, company, qualified individual, participants, emergency scenario, evaluation, changes to be implemented, time table for implementation)	Annex 5 (Att. 5A)
Response Training (sec. 1.8.3)	
• Description of Response Training program (including topics)	Annex 5 (5.1)
• Personnel Response Training Logs (Name, response training date/and number of hours, prevention training date/and number of hours)	Annex 5 (Att. 5A)
• Discharge Prevention Meeting Logs (Date, Attendees - Subjects/Issues Identified - Required Action - Implementation Date)	Annex 5 (Att. 5A)
Diagrams (sec. 1.9)	
Site Plan Diagram	
– Entire facility to scale	Annex 1 (Att. 1, Map 3)
– Above and below-ground storage tanks	Annex 1 (Att. 1, Map 3)
– Contents and capacities of bulk oil storage tanks	Annex 1 (Att. 1, Map 3)
– Contents and capacities of drum storage areas	Annex 1 (Att. 1, Map 3)
– Contents and capacities of surface impoundments	Not applicable
– Process buildings	Throughout JBLE-Eustis
– Transfer areas	Annex 1 (Att. 1, Map 3), Annex 3 Attachment 3D
– Location and capacity of secondary containment systems	Annex 1 (Att. 1, Map 3)
– Location of hazardous materials	Throughout JBLE-Eustis
– Location of communications and emergency response equipment	Annex 1 (Att. 1 Map 3)
– Location of electrical equipment that might contain oil	See SPCC Plan
– If the Facility is a Complex Facility, the interface between EPA and other regulating agencies	ICP Table 1-1
Site Drainage Plan Diagram	
• Major sanitary and storm sewers, manholes, and drains	Annex 9 (SPCC Plan Figures 5 through 17)
• Weirs and shut-off valves	Not applicable
• Surface water receiving streams	Annex 1 (Att. 1A Map 3)
• Fire fighting water sources	Not applicable (see Annex 3 (3.4.2.12))
• Other utilities	Not available

FRP Element	Location in Plan
• Response personnel ingress and egress	Annex 3 (Att. 3B)
• Response equipment transportation routes	Annex 3 (Att. 3B)
• Direction of spill flow from discharge points	Annex 1 (Att. 1A Map 3), Annex 9 (SPCC Plan)
Site Evacuation Plan Diagram	
• Evacuation routes	Annex 3 (Att. 3B)
• Location of regrouping areas	Annex 3 (Att. 3B)
Site Security (sec. 1.10) *(See Section II, 112.7(e)(9))*	
• Description of facility security (Emergency cut-off locations, enclosures, guards and their duties, lighting, valve and pump locks, pipeline connection caps)	Annex 3 (3.6.2), Annex 7 (7.8)

8.2 Cross Reference Index - USCG FRP (33 CFR Part 154)[133]

Table A8-2. Response Plan Cross Reference Index (33 CFR Part 154 Subpart F)

Note: Only those regulatory sections that prescribe Response Plan contents are cross referenced.

Part	Requirement	ICP Location
154.1030	**General response plan contents**	
154.1030(a)	The plan must be written in English	ICP and ERAP are written in English
154.1030(b)	Organization of the plan	See 33 CFR §154.1035 items
154.1035	**Specific requirements for facilities that could reasonably be expected to cause significant and substantial harm to the environment**	
154.1035(a)	*Introduction and plan content*	Sec. 1 and 2
154.1035(a)(1)	Facility's name, physical and mailing address, county, telephone, and fax	Sec. 1.4 Table 1-2
154.1035(a)(2)	Description of a facility's location in a manner that could aid in locating the facility	Sec. 1.4 Table 1-2
154.1035(a)(3)	Name, address, and procedures for contacting the owner/operator on 24-hour basis.	Sec. 1.4 Table 1-2
154.1035(a)(4)	Table of contents	ICP Table of Contents, Sec. 1.4
154.1035(a)(5)	Cross index, if appropriate	Annex 8
154.1035(a)(6)	Record of change(s) to record information on plan updates	Sec. 1.3 Table 1-1, Annex 3, Annex 6
154.1035(b)	*Emergency Response Action Plan* (separate plan)	See the ERAP
154.1035(b)(1)	Notification procedures	ERAP 2
154.1035(b)(1)(i)	Prioritized list identifying person(s), including name, telephone number, and role in plan, to be notified in event of threat or actual discharge	ERAP 2
154.1035(b)(1)(ii)	Information to be provided in initial and follow- up notifications to federal, state, and local agencies	ERAP 3

[133] 33 CFR §154.1030(e); 33 CFR §154.1035(a)(5)

Part	Requirement	ICP Location
154.1035 (b)(2)	Facility's spill mitigation procedures	ERAP 8.2
154.1035(b)(2)(i)	Volume(s) of persistent and non-persistent oil groups	ERAP 8.1.3
154.1035(b)(2)(ii)	Prioritized procedures/task delegation to mitigate or prevent a potential or actual discharge or emergencies involving certain equipment/scenarios	ERAP 8.2
154.1035(b)(2)(iii)	List of equipment and responsibilities of facility personnel to mitigate an average most probable discharge	ERAP 4
154.1035(b)(3)	Facility response activities	ERAP 8.2
154.1035(b)(3)(i)	Description of facility personnel's responsibilities to initiate/supervise response until arrival of qualified individual	ERAP 8.2
154.1035(b)(3)(ii)	Qualified individual's responsibilities/authority	ERAP 8.2.1
154.1035(b)(3)(iii)	Facility or corporate organizational structure used to manage response actions	ERAP 8.2.1.1
154.1035(b)(3)(iv)	Oil spill response organization(s)/spill management team available by contract or other approved means	ERAP 8.2.1.1
154.1035(b)(3)(v)	For mobile facilities that operate in more than one Captain of the Port, the oil spill response organization(s)/spill management team in the applicable geographic-specific appendix	Not applicable
154.1035(b)(4)	Fish and wildlife sensitive environments	ERAP 10
154.1035(b)(4)(i)	Areas of economic importance and environmental sensitivity as identified in the ACP that are potentially impacted by a WCD	ERAP 10
154.1035(b)(4)(ii)	List areas and provide maps/charts and describe response actions	ERAP 8.2.1, ERAP 9
154.1035(b)(4)(iii)	Equipment and personnel necessary to protect identified areas for WCD	ERAP 4
154.1035(b)(5)	Disposal plan	ERAP 11
154.1035(c)	*Training and exercises*	Annex 5
154.1035(d)	*Plan review and update procedures*	Annex 4 (4.1), Annex 6
154.1035(e)	*Appendices*	
154.1035(e)(1)	Facility specific information	Annex 1 (1.1, 1.2, 1.4.1.4, Attachment 1C)
154.1035(e)(2)	List of contacts	Sec. 2.2.1.1 Table 2-1, Annex 2 (2.1, 2.3.1)
154.1035(e)(3)	Equipment lists and records	Sec. 1.3.2, Annex 3 (Attachment 3C), Annex 5 (Attachment 5A)
154.1035(e)(4)	Communications plan	Annex 3 (3.2.2, 3.2.2.2)
154.1035 (e)(5)	Site-specific safety and health plan	Annex 3 (3.6.1)
154.1035(e)(6)	List of acronyms and definitions	Appendix C

Part	Requirement	ICP Location
154.1040	**Specific requirements for facilities that could reasonably be expected to cause substantial harm to the environment**	Not applicable
154.1041	**Specific response information to be maintained on mobile MTR facilities.**	Not applicable

Annex 9. JBLE-Eustis SPCC Plan

The JBLE-Eustis SPCC Plan is provided under separate cover and can be inserted here.

(Note: The electronic versions of the SPCC Plan and the ICP are provided as separate files on CD).

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