

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN



Prepared for: Old Dominion University
Env. Health & Safety
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Norfolk, Virginia 23529

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1.0 Introduction

1.1 Preparation Requirements– 40 CFR 112.3

This Spill Prevention, Control, and Countermeasures (SPCC) Plan has been prepared and implemented for Old Dominion University (ODU) in Norfolk, Virginia (the “facility”) as required by Environmental Protection Agency (EPA) regulations contained in Title 40, *Code of Federal Regulations*, Part 112 (40 CFR 112). ODU is a non-transportation, non-oil production on-shore facility and is subject to SPCC regulations if:

- 1) Due to its location, the facility could reasonably be expected to discharge oil into or upon the navigable waters of the United States;
- 2) The total aboveground storage capacity exceeds 1,320 gallons (calculated as a total of tanks and containers with capacity of 55 gallons or more); and/or
- 3) The completely buried storage capacity of non-regulated tanks exceeds 42,000 gallons.

The SPCC plan is not required to be filed with EPA, but a copy must be available for on-site review by the Regional Administrator during normal working hours if the subject facility is attended at least 4 hours a day. The SPCC plan must be submitted to the EPA Region III Regional Administrator and the state agency in charge of oil pollution control (the Department of Environmental Quality – DEQ) along with the other information specified in 40 CFR 112.4 if either of the following occurs:

- The facility discharges more than 1,000 gallons of oil into or upon navigable waters of the United States or adjoining shorelines in a single event; or
- The facility discharges more than 42 gallons of oil more than twice within any 12-month period.

Sections of the SPCC Regulations that were not applicable to this facility are not included in this document.

1.2 Reporting Requirements– 40 CFR 112.4

Discharge information must be reported to EPA Region III and DEQ within 60 days if either of the above thresholds is exceeded. The report is to contain the following information:

1. Name of the facility;
2. Name of the owner or operator of the facility;
3. Location of the facility;
4. Maximum storage or handling capacity of the facility;
5. Corrective actions and/or countermeasures taken, including a description of equipment repairs and/or replacements;
6. An adequate description of the facility, including maps, as necessary;
7. The cause of such discharge as described in 40 CFR 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;

8. Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
9. Such other information the Regional Administrator may require pertinent to the Plan or discharge.

2.0 SPCC Plan Review and Amendment– 40 CFR 112.5

The SPCC Plan shall be amended within 6 months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility's discharge potential. Amendments must be implemented as soon as possible, but no later than six months following the preparation of the amendment.

The plan must be reviewed once every 5 years and amended to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a discharge event and has been proven in the field. The SPCC review must be documented and the statement located in Attachment E of this document must be signed. All technical amendments must be certified by a registered professional engineer.

3.0 General Requirements- 40 CFR 112.7

Old Dominion University is a state-assisted educational institution located in the city of Norfolk, Virginia. This institution is comprised of various buildings and parking lots and operates as a higher education institute for on-site and commuter students. The University campus currently handles and stores petroleum products in the form of #2 fuel oil and gasoline. The figures in Attachment A show the property, drainage structures, buildings on site, and oil storage locations.

3.1 Container Descriptions

Table 1: AST Capacity Details.

Building	Contents	Size	Location
Constant Hall	#2 oil	221	East side of building attached to generator
Ted Constant Convocation Center	#2 oil	850	South side of building attached to generator
Ireland	#2 oil	425	South eastern side of building attached to generator
Scotland	#2 oil	425	North side of building
Virginia	#2 oil	425	South side of building attached to generator
England House	#2 oil	425	South side of the building
France House	#2 oil	425	North side of the building
Diehn Fine and Performing Arts	#2 oil	150	West side of building in fenced/locked area
E.V. Williams Engineering and Computational Sciences	#2 oil	5,000	Northeast end of building attached to generator
Dragas & Hughes Hall	#2 oil	800	West side of building
Oceanography and Physics	#2 oil	300	South side near loading dock attached to generator
Perry Library	#2 oil	300	South side near loading dock attached to generator
VBHEC	#2 oil	173	North side of building
Orchid Conservatory	#2 oil	145	North side of building
Tri-Cities	#2 oil	305	North side of building
Game day	#2 oil	250	West side of stadium west near lot 6
VMASC	#2 oil	950	Northeast side of building
Stadium East	Diesel	200	Southeast corner of Koch Hall
Stadium West	#2 oil	500	West side near lot 6
Facilities Management	Diesel	1000	SE side near the building

Total AST Storage: 13,269 gallons.

Table 2: UST Capacity Details.

Building	Contents	Size	Location
Facilities Management	#2 oil	6,000	Southeast corner in parking area
Life sciences	#2 oil	1000	West side near cooling tower in grassy area and under sidewalk
Facilities Management	Gasoline	6,000	West end of storage shed
Rollins Hall	#2 oil	7,500	Northwest corner in parking lot by NROTC
Spong Hall	#2 oil	1,000	South side under sidewalk outside boiler room
Visual Arts	#2 oil	1,000	Northwest side between Visual Arts Center and Constant Hall in concrete
Webb University Center	#2 oil	10,000	Southwest corner of building under roadway

Total UST Storage: 32,500 gallons.

Vehicles: The University has approximately 122 service vehicles.

3.2 Discharge Prevention and Control Measures

- Aboveground storage tanks, drums, and containers will all be located within secondary containment (even those indoors). Those which are not currently located within adequate secondary containment will be retrofitted or lawfully discarded in the near future.
- Petroleum transfer operations (such as fueling, pumping used oil to ASTs, filling/emptying tanks, etc.) are observed by trained ODU personnel. No petroleum transfer operations are conducted without a person in attendance.
- Pumps are kept in the off position. Where applicable pumps are unplugged/disconnected from the power source after use.
- All caps, lids, and valves on the ASTs and 55-gallon drums are kept closed, to prevent intake of precipitation and release of materials.
- Liquid levels in secondary containment structures are visually monitored for evidence of a discharge.
- Valves on secondary containment structures are kept closed.
- Sorbent materials are kept on-site. They are kept in places that are easily accessed in the case of a spill or leak.
- Oil storage containers near high traffic areas have collision protection.

3.3 Countermeasures for Discharge Discovery, Response, and Cleanup

Spills or leaks are cleaned up promptly by facility personnel. The fire department is called for major spills that facility personnel cannot handle. Materials for cleaning up spills (oil dry) are kept on-site in easily accessed locations.

The following general countermeasures procedure will be utilized in the event of a discharge:

1. Petroleum transfer operations are ceased, if applicable
2. Sorbent materials are used to control release
3. Director of Environmental Health and Safety is notified
4. Decision is made whether additional assistance is needed and outside resources (like fire department are called), if applicable
5. Release is cleaned up
6. Cause of release is determined and corrected, if applicable
7. Used sorbent materials are removed once cleanup is complete

3.4 Disposal Methods

Recovered oil, contaminated equipment, and used sorbent materials will be placed in appropriate containers (steel drums, tank trucks, etc.). The materials will be disposed of in accordance with local, state, and federal regulations.

3.5 Emergency Phone Numbers

The following is a prioritized list of contacts in the event of a discharge or substantial threat of a discharge.

- | | |
|--------------------------------------------------------------------|----------------|
| a. ODU Public Safety | (757) 683-4000 |
| b. City of Norfolk Haz-Mat Response Team through ODU Public Safety | |
| c. EHSO | (757) 683-4495 |
| d. Dept. of Emergency Management | (800) 468-8892 |
| e. National Response Center | (800) 424-8802 |

3.6 Discharge Reporting Procedures

When one of the above listed government agencies is notified of a discharge be prepared to provide the following information:

- Facility Name: Old Dominion University
- Facility Address/Location: Spong Hall, Suite 2501, Norfolk, VA 23529 (be prepared to describe where on the facility the discharge occurred)
- Facility Phone Number: 757-683-4495
- Date and time of discharge
- Type of material discharged
- Estimates of total quantity of discharge
- Source of the discharge
- Description of all affected media
- Cause of the discharge
- Damages or injuries caused by the discharge
- Actions being taken to stop, remove, and mitigate the discharge
- Whether an evacuation may be needed
- Names of individuals and/or organizations who have been contacted

3.7 Potential Discharge Information

A tank overflow, rupture, or leak, if it breaches the secondary containment, is predicted to flow as described in the following table. The rate of flow could vary from instantaneous to a slow leak. The maximum amount of petroleum products which can be discharged is the volume of the leaking container. See Figure 2 in Attachment A for locations and contents.

Table 5 details the potential for release(s) from the facility. These numbers were derived from “best guess” based on presumed best and worst case scenarios for each potential release category.

Table 3: Potential Release Data.			
Potential Event	Discharge Direction	Volume of Release	Discharge Rate
Complete failure of a full AST	West towards Elizabeth River	Up to 5,000 gallons	Instantaneous
Partial failure of a full AST	West towards Elizabeth River	1 to 5,000 gallons	Gradual to Instantaneous
Tank overfill	Adjacent storm drain, then flows west towards Elizabeth River	1 to 1,000 gallons	Instantaneous
Pipe Failure	Adjacent storm drain, then flows west towards Elizabeth River	1 to 1,000 gallons	Instantaneous
Leaking pipe	Adjacent storm drain, then flows west towards Elizabeth River	1 to 1,000 gallons	Gradual to Instantaneous
Delivery truck leak	Adjacent storm drain, then flows west towards Elizabeth River	1 to 5,000 gallons	Instantaneous

3.8 Discharge Prevention Structures

- All ASTs used to store oil are double walled steel tanks or are located within buildings or other protective structures.
- Sorbent materials (i.e., oil dry, pads, and spill socks) are provided for minor emergency situations, should one occur on campus. Spill response materials are located as follows:
 - a. EHSO maintains the following three locations:
 1. The EHSO van,
 2. The EHSO office, and
 3. ODU Emergency Response trailer parked in the Convocation Center parking garage, 2nd floor.
 - b. In the Mechanical Shop in the Facilities Maintenance Building.

3.9 Inspections, Tests, and Records

All records, inspections, and tests described in this report must be signed by the appropriate supervisor and kept with the SPCC Plan for a period of three years.

3.10 Personnel Training

ODU personnel are trained in the operation and maintenance of equipment used to prevent discharges, discharge procedure protocols, applicable pollution control laws, rules and regulations; general facility operations, and the contents of this plan. The Director of Environmental Health and Safety is designated to be accountable for discharge prevention. This person reports directly to management.

Discharge prevention briefings are conducted annually for all oil-handling personnel. This training is to ensure that personnel have an adequate understanding of the SPCC Plan. The briefing also highlights known discharges or failures (if applicable), malfunctioning components, and any new precautionary measures.

Records of briefings are kept in Appendix C.

3.11 Security

1. All ASTs are locked within buildings and/or fencing at all times.
2. All ASTs are located within well illuminated areas of the campus.

4.0 Requirements for Onshore Facilities – 40 CFR 112.8

4.1 Drainage

The facility is comprised of a 188 acre college campus and petroleum tanks are located throughout the campus, where needed. Tanks contain gasoline and heating oil. Aboveground tanks are either double walled steel tanks, or are located within buildings or other protective structures. Drainage at the facility is unique to the tank location. Maps of each tank location and the associated drainage are attached in Appendix A.

4.2 Bulk Storage Containers

- Each aboveground tank is of UL-142 construction and is compatible with the oils they contain and conditions of storage.
- All aboveground tanks used to store oil are double walled steel tanks, or are located within buildings or other protective structures.
- There are no partially buried tanks at the facility.
- Aboveground containers are periodically tested (once every 5 years on drums and tanks larger than 55-gallons) using a system of visual inspection combined with non-

destructive shell thickness testing, including inspection of container supports and foundations. Comparison records are maintained.

- There are no non-internal heating coils at this facility.
- Oil leaks that result in a loss of oil from container seams, gaskets, rivets, and bolts are promptly corrected.

4.3 Facility Transfer Operations

All aboveground valves, piping (lines), and appurtenances should be inspected regularly. The general condition of these items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces should be assessed.

Attachment A: Figures

Figure	Site
1	Old Dominion University
2	Virginia House & Ireland House
3	Constant Hall & Visual Arts Building
4	Diehn Fine & Performing Arts Center and Webb University Center
5	Visual Arts & Dragas Hall
6	Engineering & Computational Science
7	England House
8	Facilities Management
9	France House
10	Perry Library & Student Success Center
11	Rollins Hall & Spong Hall
12	Oceanography & Physical Sciences Building
13	Kaplan Orchid Conservatory
14	Ted Constant Convocation Center



Figure 1

NOT TO SCALE

Date: 02/19/2021

Office of Environmental
Health & Safety

Old Dominion University
Norfolk, Virginia

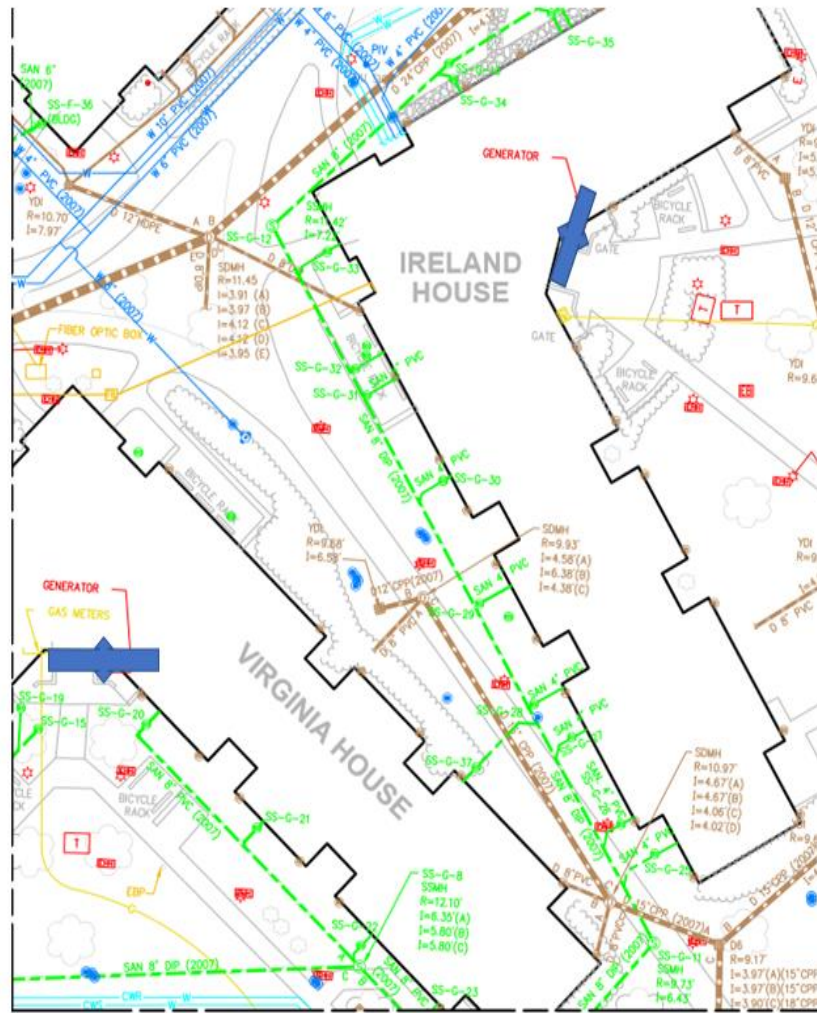



Figure 2

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Virginia House and Ireland House</p> <p>Old Dominion University Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (AST) </p>
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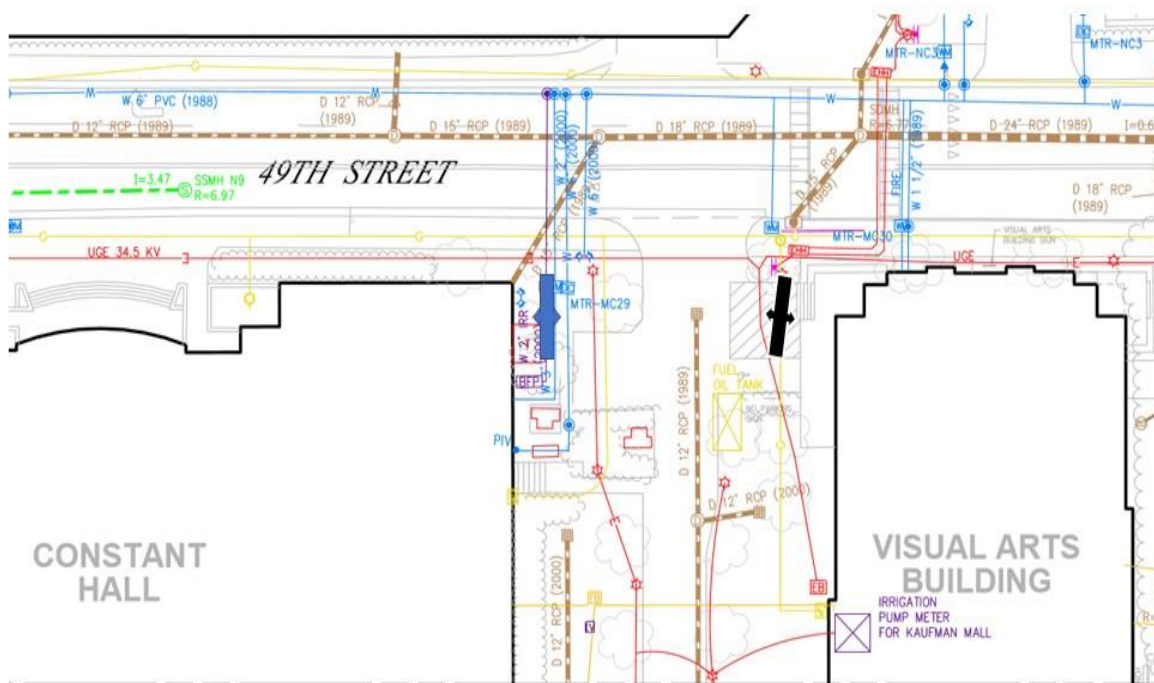




Figure 3

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Constant Hall & Visual Arts Building</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (AST) </p> <p>Fuel tank (UST) </p>
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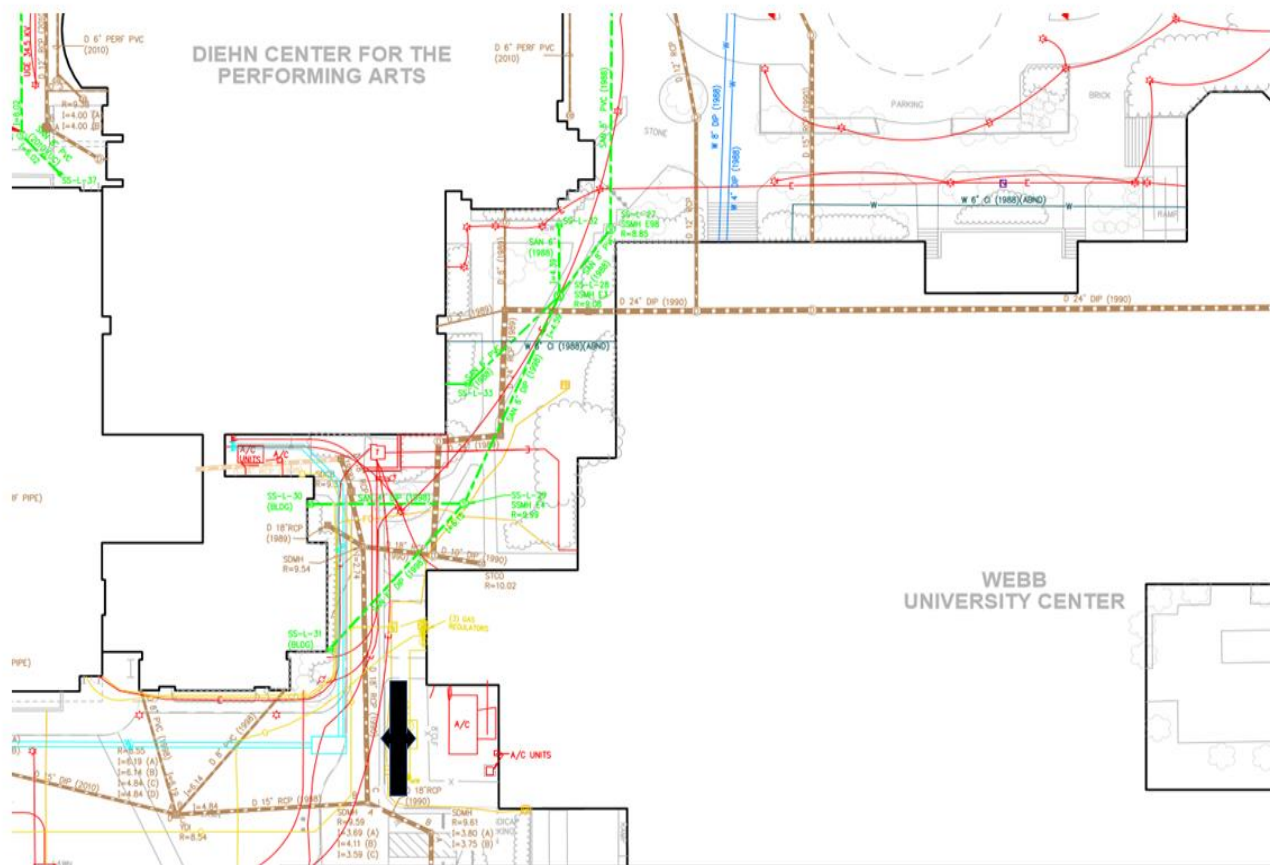



Figure 4

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Diehn Fine & Performing Arts Center & Webb University Center</p> <p>Old Dominion University Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (UST) </p>
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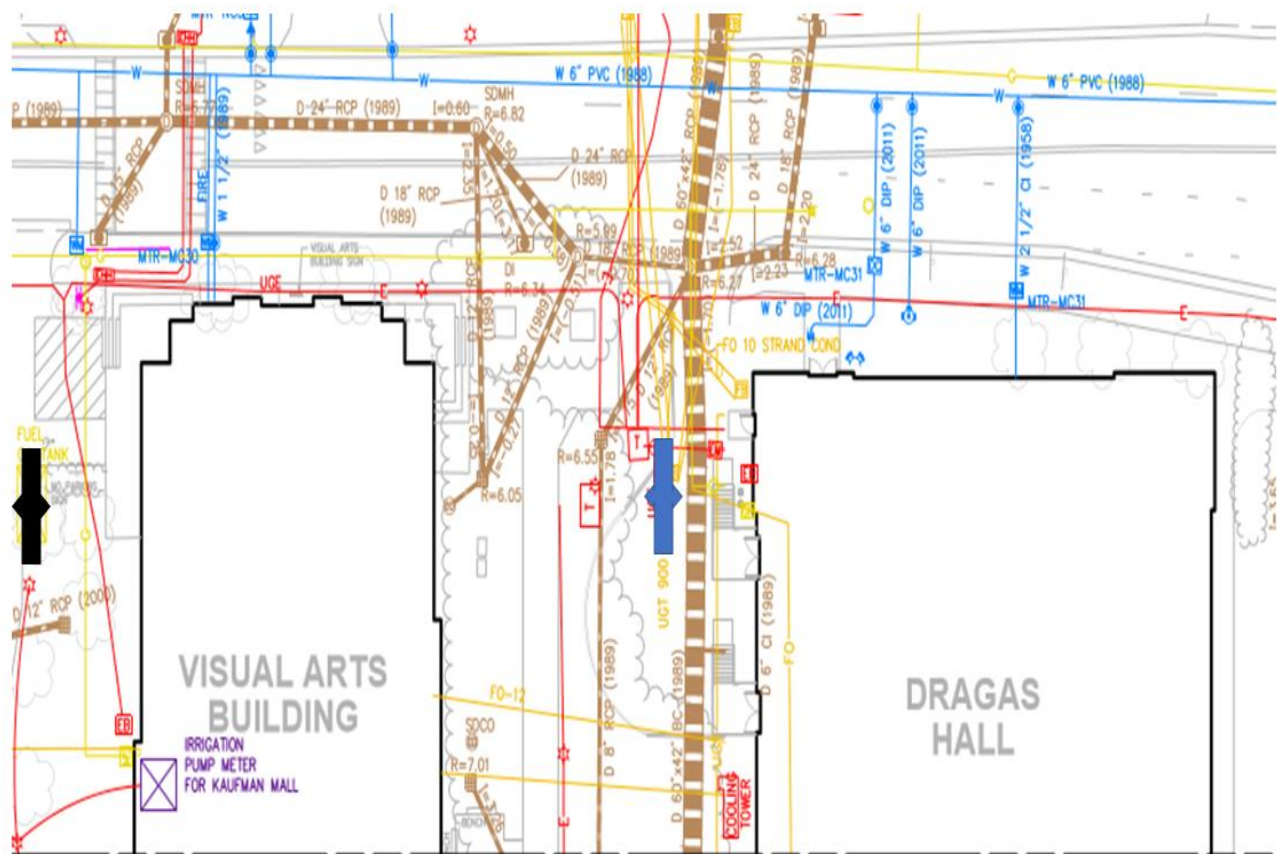


Figure 5

NOT TO SCALE


Date: 02/19/2021


Office of Environmental
Health & Safety

Visual Arts & Dragas Hall

Old Dominion University
Norfolk, Virginia

Legend:

Fuel tank (AST) 

Fuel tank (UST) 

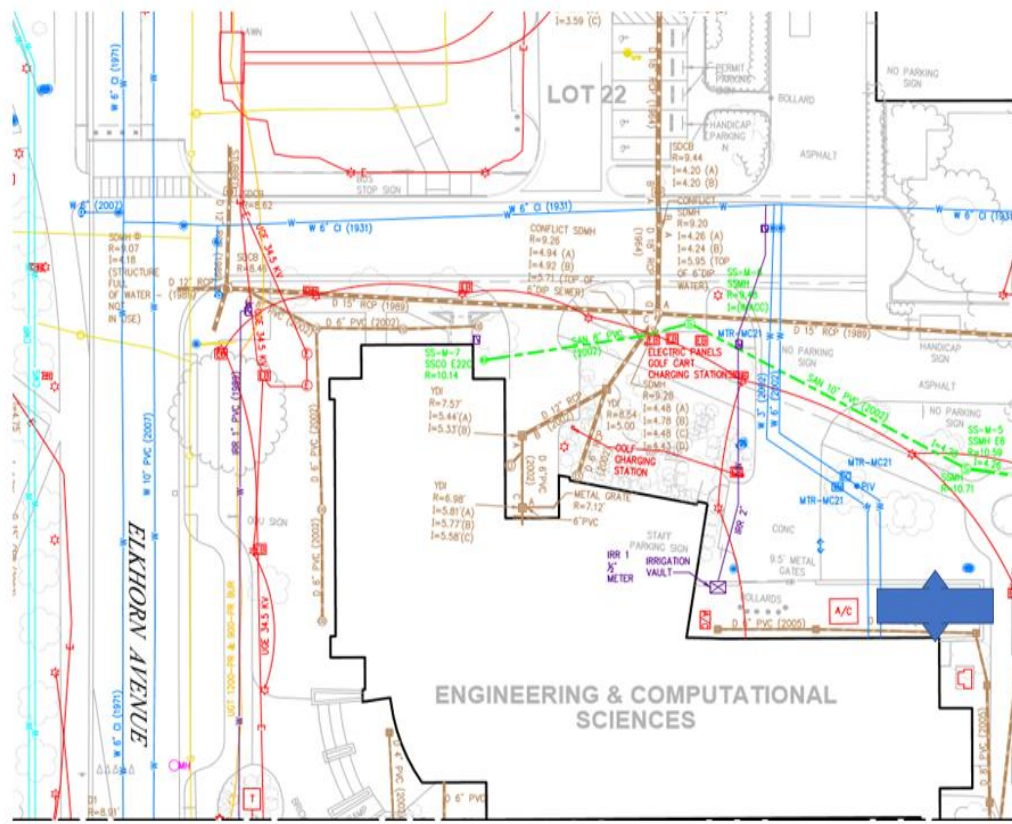



Figure 6

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Engineering & Computational Science</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (AST) </p>
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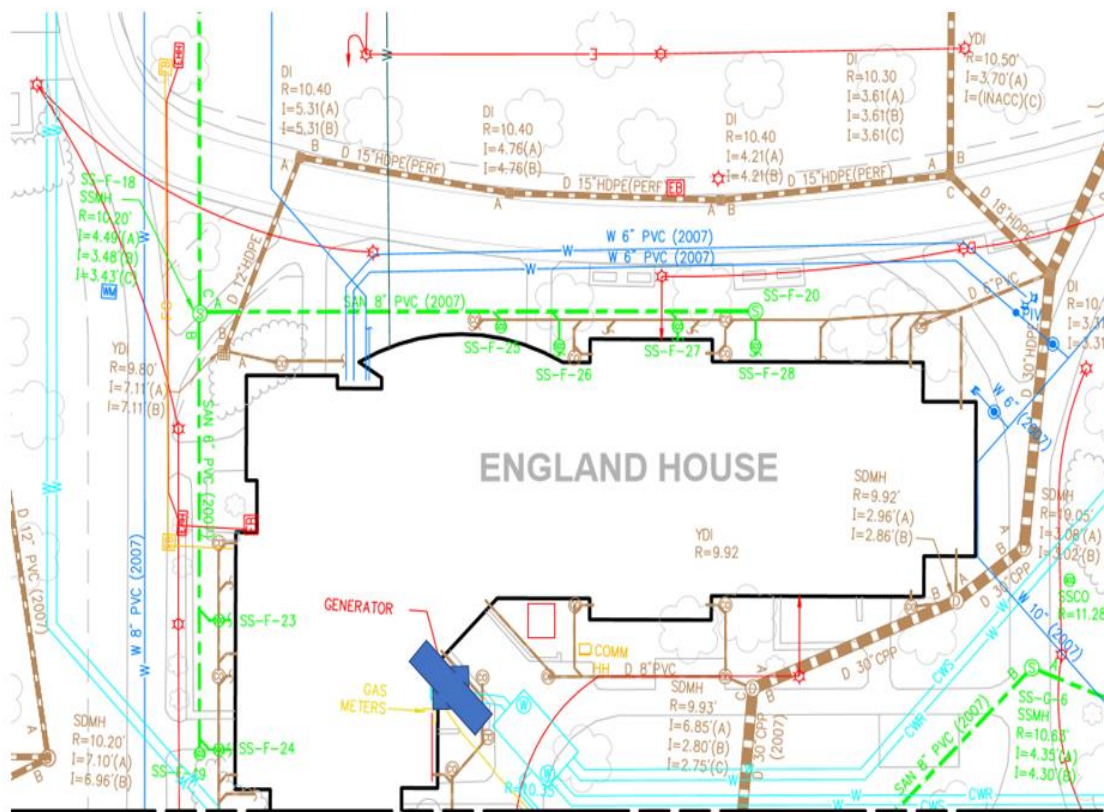



Figure 7

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>England House</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p>Legend:</p> <p>Fuel tank (AST) </p>
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Perry Library

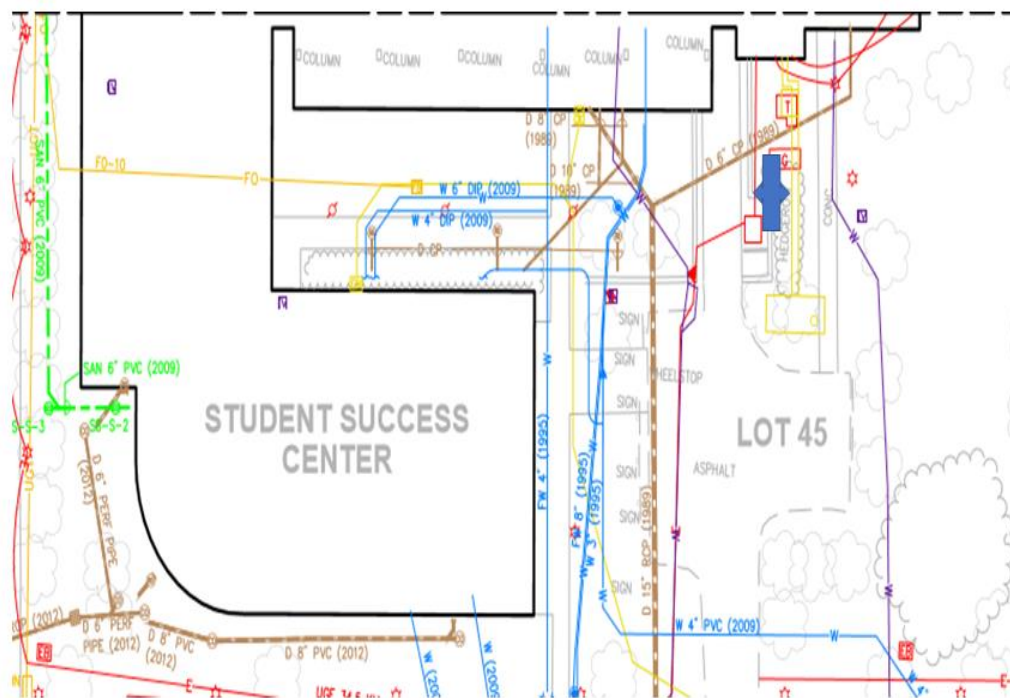


Figure 10

NOT TO SCALE

Date: 02/19/2021

Office of Environmental
Health & Safety

Perry Library & Student Success Center

Old Dominion University
Norfolk, Virginia

Legend:

Fuel tank (AST) 

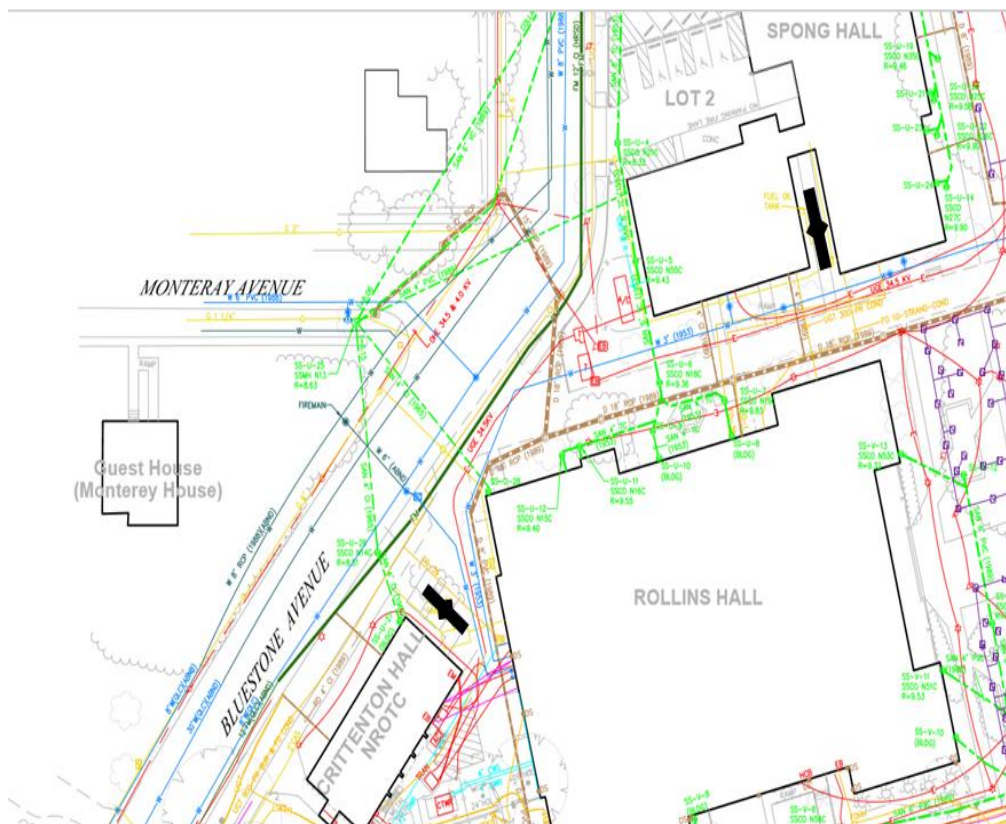



Figure 11

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Rollins Hall & Spong Hall</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (UST) </p>
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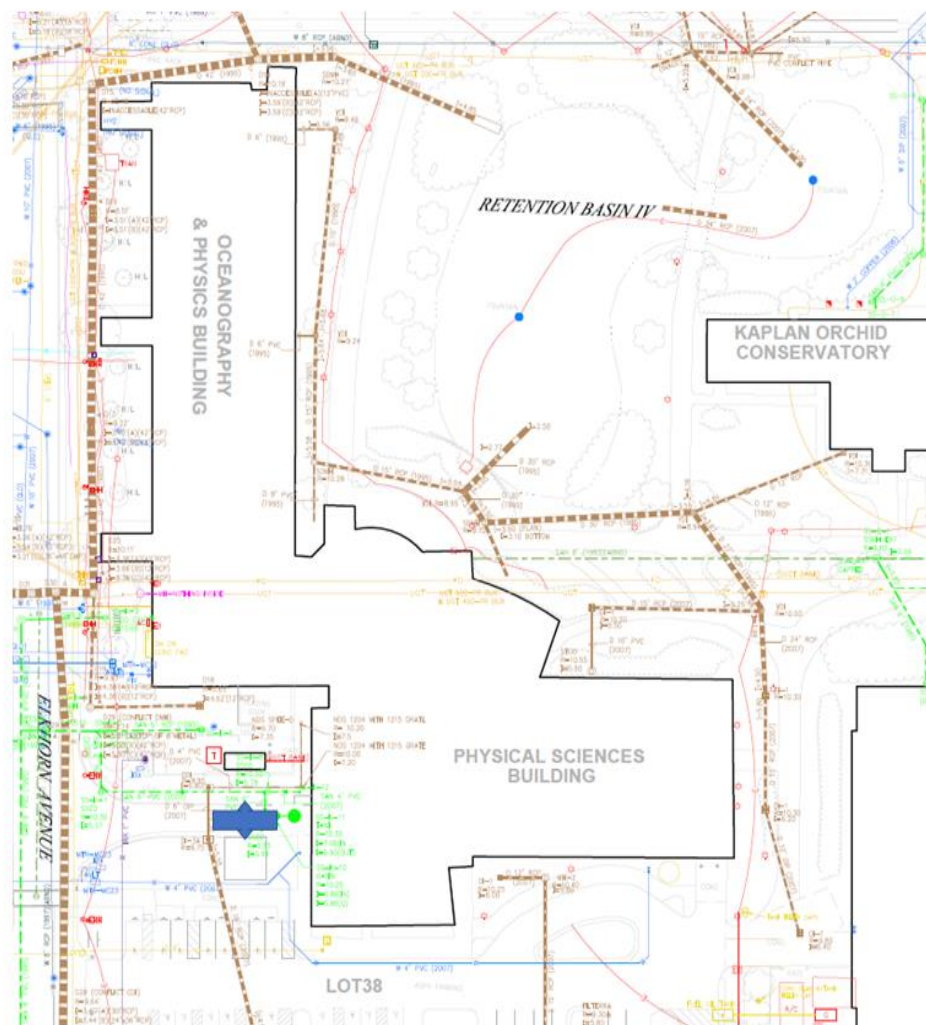



Figure 12

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Oceanography & Physical Sciences</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (AST) </p>
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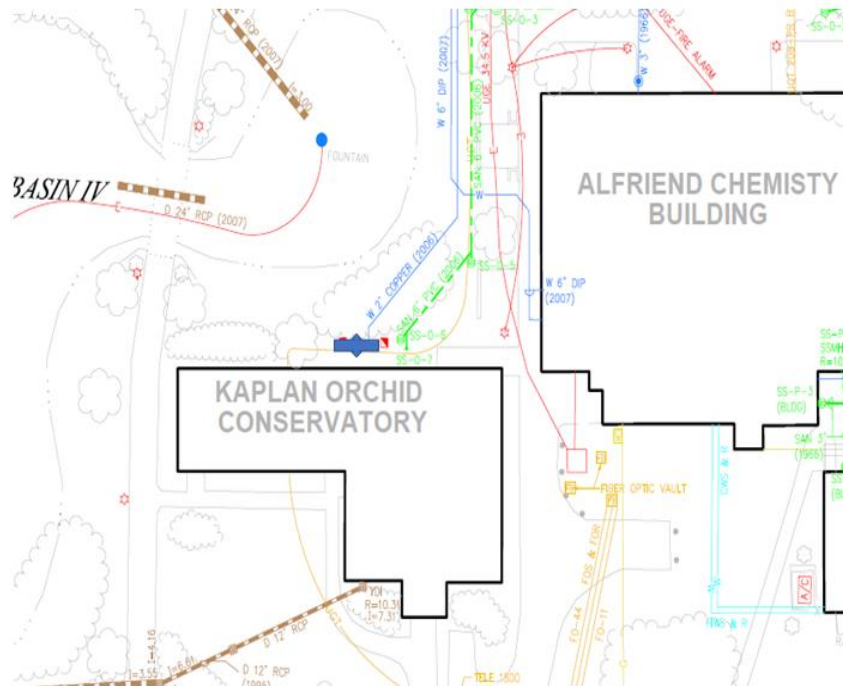



Figure 13

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Kaplan Orchid Conservatory</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p>Legend:</p> <p>Fuel tank (AST) </p>
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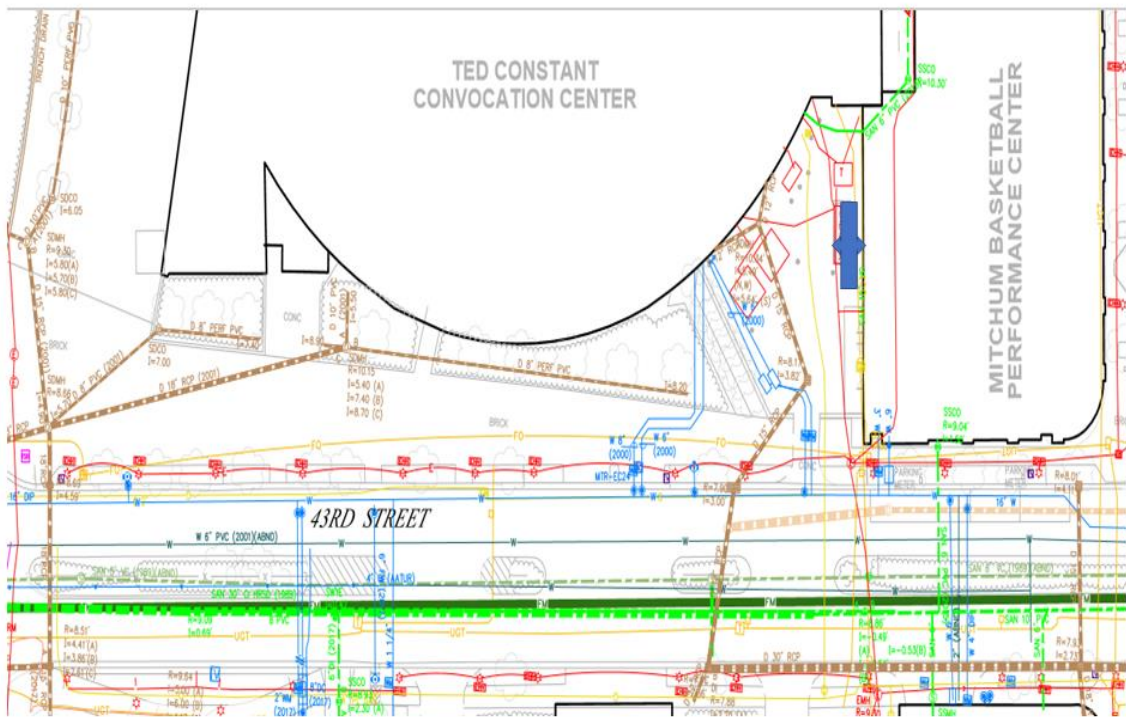



Figure 14

<p>NOT TO SCALE</p> <p>Date: 02/19/2021</p> <p>Office of Environmental Health & Safety</p>	<p>Ted Constant Convocation Center</p> <p>Old Dominion University</p> <p>Norfolk, Virginia</p>	<p><u>Legend:</u></p> <p>Fuel tank (AST) </p>
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Attachment B: Facility Inspection and Test Records

Monthly tank inspection - Place a check beside each item if OK or write "YES" if there is a problem. If "YES" is indicated, please describe the condition on the back of this sheet and notify the EH&SO immediately.

Tanks Building Size - Contents Type	Tank surface or area above/around tank shows signs of leakage	Tank system is damaged, rusted or deteriorated	Tank Supports are deteriorated or buckled	Tank foundations have eroded or settled	Vents are obstructed	Valve seals or gaskets are leaking	Connections are not capped or blank-flanged	Fencing, gates, or lighting is not functional	Buried pipes are exposed
ASTs									
Constant Convocation Center 850 AST - #2 Fuel Oil DW Steel									
Constant Hall 250 AST - #2 Fuel Oil DW Steel									
Perry Library 300 AST - #2 Fuel Oil DW Steel									
Diehn Fine & Performing Arts 300 AST - #2 Fuel Oil SW Steel									
Oceanography & Physics 300 AST - #2 Fuel Oil DW Steel									
Ireland House 425 AST - #2 Fuel Oil SW Steel									
England House #2 oil- 425 DW steel									
Scotland House #2 oil- 425									
VBHEC #2 oil- 173									
Physical Plant #2 oil- 6000									
Game day #2 oil- 250									
VMASC #2 oil- 950									
Tri-cities #2 oil- 305									
Facilities management #2 oil DW Steel									

Attachment C: Training Records

RECORD OF DISCHARGE PREVENTION BRIEFINGS

In accordance with the requirements of 40 CFR 112.7(f), this record of discharge prevention briefings for oil handling personnel will be completed at least once every year. The briefings must highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures. Further descriptions or comments should be attached on a separate sheet of paper if necessary. Each person who participated in the briefing is listed in the briefing is listed below with printed name, signature, and the date of participation in the briefing.

Facility Name: ODU

[illegible]

Attachment D: Certification of Substantial Harm

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: ODU

Facility Address: Norfolk, Virginia

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

Yes _____ 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 storage tank area?

Yes _____ No ✓

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 such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes _____ No ✓

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 such that a discharge from the facility would shut down a public drinking water intake?

Yes _____ No ✓

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 discharge in an amount greater to 10,000 gallons within the last 5 years?

Yes _____ No ✓

CERTIFICATION

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

Signature _____

Printed Name _____

Date _____

Attachment E: SPCC Review Certification

SPCC Review Certification

The facility owner or operator must complete the following section each time the SPCC is amended and/or reviewed, as required by 40 CFR 112.5 (b).

I have completed review and evaluation of the SPCC Plan for ODU on

_____ (date) and will / will not (circle one) amend the plan as a result.

Notes: _____

I have completed review and evaluation of the SPCC Plan for ODU on

_____ (date) and will / will not (circle one) amend the plan as a result.

Notes: _____

I have completed review and evaluation of the SPCC Plan for ODU on

_____ (date) and will / will not (circle one) amend the plan as a result.

Notes: _____
