

# **SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN**

Prepared for

University of Connecticut  
Avery Point Regional Campus  
Groton, Connecticut

Prepared by

**CDM Smith**

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Date of Last Plan Review: 2015

May 2021

**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN  
UNIVERSITY OF CONNECTICUT, AVERY POINT CAMPUS  
FACILITY INFORMATION**

1. Name of Facility: University of Connecticut, Avery Point Regional Campus
2. Type of Facility: State University
3. Location of Facility: 1084 Shennecossett Road  
Groton, Connecticut 06340
4. Name and Address of Owner or Operator:  
University of Connecticut  
Gulley Hall  
352 Mansfield Road, Unit 2086  
Storrs, CT 06269-2086
5. Designated persons accountable for oil spill prevention at the facility:  
Name: John "Ben" Roccapriore  
Title: Facility Manager, Avery Point Regional Campus  
Name: Eric Kruger  
Title: Executive Director Regional Campuses/Facilities Trade

**FACILITY MANAGEMENT APPROVAL (40 CFR 112.7)**

By signature, I certify that this Spill Prevention, Control and Countermeasure (SPCC) Plan has the full approval of the management of The University of Connecticut, Avery Point Regional Campus at a level of authority to commit the necessary resources to fully implement the Plan.

Signature: 

Name: P. Michael Jednak

Title: AVP of Facilities Operations and Building Services

Date: 6-3-21

**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN**  
**UNIVERSITY OF CONNECTICUT, AVERY POINT CAMPUS**  
***Certification of the Inapplicability of the Substantial Harm Criteria***  
(Attachment C-II to 40 CFR 112 Appendix C)

Facility Name: University of Connecticut, Avery Point Regional Campus

Facility Address: 1084 Shennecossett Road, Groton, Connecticut, 06340

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 ☐ 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 ☒
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 Attachment C-III to this appendix or a comparable formula<sup>1</sup>) 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" (see Appendix E to this part, section 13, for availability) and the applicable Area Contingency Plan.  
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 (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.  
<sup>2</sup>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 ☒
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 than or equal 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, 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.

Name: P. Michael Jednak

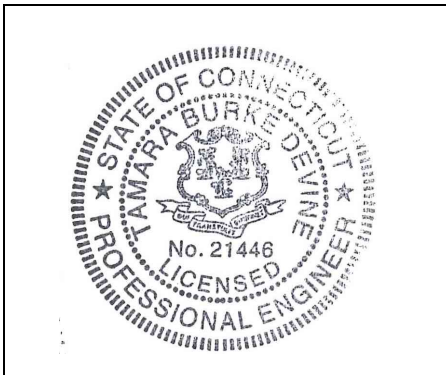
Signature: 

Title: Associate Vice President of Facilities Operations Date: 6-3-21

**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN**  
**UNIVERSITY OF CONNECTICUT, AVERY POINT CAMPUS**  
**PROFESSIONAL ENGINEER CERTIFICATION**  
**(40 CFR 112.3(d))**

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1. By means of this certification the Professional Engineer attests:
  - I. That he/she is familiar with the requirements for this part;
  - II. That he/she or his/her agent has visited and examined the facility;
  - III. That the Plan has been prepared in good accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;
  - IV. That procedures for required inspections and testing have been established; and
  - V. That the Plan is adequate for the facility.
2. Such certification shall in no way relieve the owner or operator of a facility of his/her duty to prepare and fully implement such Plan in accordance with the requirements of this part.



Tamara Burke Devine, PE  
Printed Name of Registered  
Professional Engineer

  
\_\_\_\_\_  
Signature of Registered Professional Engineer

Date: 5/21/21

Facility: University of Connecticut,  
Avery Point Regional Campus

Registration No. 18944

Location: 1084 Shennecossett Road  
Groton, Connecticut

State: Connecticut

Date of Plan: May 2021

**SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN**  
**REVIEW DOCUMENTATION FORM**  
**THE UNIVERSITY OF CONNECTICUT, AVERY POINT CAMPUS**  
**(PER 40 CFR Section 112.5(b), THE SPCC PLAN MUST BE REVIEWED AT LEAST EVERY 5 YEARS)**

NAME	CERTIFICATION	DATE
	<p>I have completed review and evaluation of the SPCC Plan for The University of Connecticut, Avery Point Regional Campus on <u>9/17/15</u> and <u>(will)</u> (will not) amend* the Plan as a result.</p> <p><u><i>Amelia J. [Signature]</i> Professional Engineer</u>  <b>SIGNATURE/TITLE</b></p>	
Paul Ferri, Manager, EHS - Environmental Programs	<p>I have completed review and evaluation of the SPCC Plan for The University of Connecticut, Avery Point Regional Campus on <u>5/3/21</u> and <u>(will)</u> (will not) amend* the Plan as a result.</p> <p><u><i>Paul Ferri</i> EHS-Envtl Programs Manager</u>  <b>SIGNATURE/TITLE</b></p>	5/3/21
	<p>I have completed review and evaluation of the SPCC Plan for The University of Connecticut, Avery Point Regional Campus on _____ and <u>will</u> (will not) amend* the Plan as a result.</p> <p>_____  <b>SIGNATURE/TITLE</b></p>	
	<p>I have completed review and evaluation of the SPCC Plan for The University of Connecticut, Avery Point Regional Campus on _____ and <u>will</u> (will not) amend* the Plan as a result.</p> <p>_____  <b>SIGNATURE/TITLE</b></p>	
	<p>I have completed review and evaluation of the SPCC Plan for The University of Connecticut, Avery Point Regional Campus on _____ and <u>will</u> (will not) amend* the Plan as a result.</p> <p>_____  <b>SIGNATURE/TITLE</b></p>	

**\*A PROFESSIONAL ENGINEER MUST CERTIFY TECHNICAL AMENDMENTS TO THE PLAN. PE CERTIFICATION IS NOT REQUIRED FOR NON-TECHNICAL AMENDMENTS SUCH AS CHANGES TO PHONE NUMBERS, NAMES, ETC.**

**SPCC Plan Cross Reference Table**  
**UConn, Avery Point Regional Campus**

<b>Final SPCC Rule</b>	<b>Description of Section</b>	<b>Plan Section(s)</b>
<b>§ 112.7 General requirements for SPCC Plans for all facilities and all oil types.</b>		
§ 112.7	Facility management approval and commitment	Page i
§ 112.7(a)	General requirements; discussion of facility's conformance with rule requirements	1.1, 1.2, 1.3, 1.4
§ 112.7(a)(3)	Description of physical layout of the facility and facility diagram	2.1, Figure 2
§ 112.7(a)(3)(i)	Oil storage containers	3.1-3.5
§ 112.7(a)(3)(ii)	Discharge prevention measures; loading/unloading facility transfers	3.1-3.5, 5.2
§ 112.7(a)(3)(iii)	Discharge and drainage controls	3.1-3.5
§ 112.7(a)(3)(iv)	Countermeasures for discharge discovery, response and cleanup, disposal of recovered materials. Contact list and phone numbers.	7.0
§ 112.7(b)	Potential discharge volume	3.1-3.5
§ 112.7(c)	Secondary containment	3.1-3.5
§ 112.7(d)	Contingency planning	Not Applicable
§ 112.7(e)	Inspections, tests, and records	4.1
§ 112.7(f)	Personnel training	6.0
§ 112.7(g)	Security	4.2
§ 112.7(a)(3)(ii)	Transfer Areas	5.2
§ 112.7(h)	Tank Car/Truck Loading/Unloading Rack	Not Applicable
§ 112.7(i)	Brittle fracture evaluation requirements	Not Applicable
§ 112.7(j)	Conformance with State requirements	Not Applicable
<b>§ 112.8 and § 112.12 Requirements for Onshore Facilities</b>		
§ 112.8(b) and § 112.12(b)	Facility drainage	2.3
§ 112.8(c) and § 112.12(c)	Bulk storage containers	3.1-3.5
§ 112.8(d) and § 112.12(d)	Facility transfer operations, pumping, and facility process	5.2

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## **1.0 INTRODUCTION**

### **1.1 Purpose**

This plan has been developed to provide a framework for the University's management of stored oil and its response to an uncontrolled release of oil that may have an impact on the environment.

### **1.2 Background**

The Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (CWA), authorized the establishment of methods, procedures, equipment and other requirements for the prevention and containment of discharges of oil and hazardous substances from vessels and onshore and offshore facilities. The US Environmental Protection Agency's (EPA) Oil Pollution Prevention regulations, developed because of the CWA, are contained within Title 40 of the Federal Code of Regulations (CFR) Part 112. The regulations state that facilities that have oil storage of more than 1,320 gallons aboveground or 42,000 gallons underground are required to put a Spill Prevention Control and Countermeasure (SPCC) Plan in place to prevent and/or mitigate discharges of oil to navigable waters and adjoining shorelines.

The SPCC rule was first promulgated in 1973 (effective January 1974) with significant amendments made to 40 CFR 112 in a final rule issued on July 17, 2002. A number of changes and clarifications to regulations were made, including, but not limited to: exempting underground storage tanks (UST) from the 42,000-gallon threshold if the tanks are in compliance with 40 CFR 280; eliminating the threshold for a single 660-gallon aboveground tank (AST); only counting containers with a capacity of 55-gallons or greater when determining the total storage capacity; changing the required testing and inspection requirements; and reducing the plan review frequency from every three to every five years.

Since EPA issued the final SPCC rule in July 2002, EPA has made several other amendments including the December 2006, December 2008, and November 2009 final rules, to address several issues raised in the July 2002 final rule. These revisions included: modified requirements for facilities with smaller oil storage capacity, qualified oil-filled operational equipment and mobile refuelers; exemptions for specific oil containers and types of oil; tailored requirements to specific industry sectors (e.g., farms, oil production facilities) and to streamline certain requirements. The effective date of the December 5, 2008 and November 13, 2009 final rules is January 14, 2010 with a compliance date of November 10, 2010 which was extended to November 10, 2011.

Regulations governing the preparation of an SPCC Plan (40 CFR 112.7) require that specific information be included to demonstrate that the facility is in compliance with the established standards and meets the

intent of the regulation to minimize the harmful effects of oil upon navigable waters.

The term “oil” is defined at 40 CFR 112.2 and Section 311(a)(1) of the CWA as:

*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.*

The US Coast Guard (USCG) maintains a separate list of substances it considers oil for its regulatory purposes. The USCG *List of Petroleum and Non-petroleum Oils* may be used as a guide to determine if a particular substance is an oil; however, the USCG list is not comprehensive and does not include all oils that are subject to 40 CFR Part 112. The USCG list can be found here:

<https://homeport.uscg.mil/Lists/Content/Attachments/376/2013.03.18%20OPA90%20Oils%20and%20oil-likes.pdf>

The term “harmful quantities” is defined in 40 CFR Part 110 (also referred to as the “sheen rule”) with discharges of harmful quantities including those that (a) violate applicable water quality standards, or (b) cause a film, sheen, or discoloration of the surface of the water or (c) adjoining shoreline or cause a sludge or emulsion to be deposited beneath the surface of the water or adjoining shoreline.

### **1.3     Scope**

The Storrs Campus, the Depot Campus and the Avery Point Campus all have current oil storage capacity and operations that require the development and implementation of a site-specific SPCC Plan. Each Plan describes the facility, its oil storage tanks, secondary containment structures, site drainage and security features, potential for releases that will impact the environment, training requirements for facility personnel, and procedures for responding to and reporting an emergency release. A Professional Engineer must certify the SPCC Plans and they must be fully reviewed, updated and recertified at least once every five years. On an annual basis, facility management conducts a review of each Plan to determine whether any modifications are required. Administrative changes, such as names of staff members and telephone numbers, are allowed without PE Certification. Any substantive modification of the Plans, especially the installation of a new tank, requires a new PE stamp. Facility personnel identified in the Plans attend annual training to maintain familiarity with the SPCC requirements.

Where applicable, references to the corresponding federal regulatory requirements have been provided. This plan addresses the general requirements of 40 CFR 112.7 and the relevant portions of the SPCC Plan requirements for onshore facilities in 40 CFR 112.8 and 40 CFR 112.12. Onshore facilities (excluding

production facilities) with petroleum and non-petroleum oils, excluding animal, fish, marine mammal, and vegetable oils, must comply with the additional SPCC requirements outlined in 40 CFR 112.8. Onshore facilities that store or use animal fats, oils and greases and fish, marine mammal and vegetable oils, which for the UConn Avery Campus includes waste kitchen grease, must comply with the additional SPCC requirements outlined in 40 CFR 112.12.

#### **1.4     Applicability**

This document presents the SPCC Plan for the UConn Avery Point Campus in accordance with the most recent amendments to 40 CFR Part 112 and is an update to the facility’s previous SPCC Plan. An SPCC Plan is required for the UConn Avery Point Campus because discharge of oil in quantities that may be harmful to navigable waters of the United States can be reasonably expected and oil is stored in excess of the following threshold values:

- The aboveground oil storage capacity of the facility is greater than 1,320 gallons; or
- The completely buried oil storage capacity of the facility is greater than 42,000 gallons

For purposes of the aggregate aboveground storage capacity, only containers of oil with a capacity of 55 gallons or greater are counted. There are multiple oil/water separators included in the stormwater drainage systems from the site, each with 1,000 gallons of capacity. Because the oil/water separators are intended only as secondary containment and do not regularly contain oil, the capacities are not included in the total oil capacity of the campus.

<b>SPCC Plan Enabling Criteria</b>	<b>UConn Avery Point Conditions</b>
Total completely buried UST volume greater than 42,000 gal.	Total = 0 gallons
Total aboveground volume greater than 1,320 gal.	Total = 3,110 gallons
Reasonably expected to discharge oil in harmful quantities to navigable waters	Proximity to navigable waterways (Long Island Sound)

There are no oil production or oil drilling facilities at the UConn Avery Point Campus. Therefore, 40 CFR 112.9 and 112.10 are not applicable.

The UConn Avery Point Campus is not required to prepare a Facility Response Plan as defined in 40 CFR 112.20 since it has less than 42,000 gallons of oil storage. As required by Section 3.0 of Appendix C to 40 CFR 112, certification of the non-applicability of the substantial harm criteria is included at the beginning of this document, with the SPCC Plan certifications.

### **1.5 Plan Review and Amendment Procedures**

A registered Professional Engineer must certify any technical amendment to this SPCC Plan [40 CFR Section 112.5]. The regulations at 40 CFR 112.5 require amendment of the SPCC Plan under the following conditions:

- Whenever there is a change in the facility design, construction, operation, or maintenance that affects the facility's potential for the discharge of oil.
- At a minimum, this SPCC Plan must be reviewed and evaluated at least once every five years. A sign-off sheet to document these reviews is attached to the front of this plan (page v).

### **1.6 Plan Distribution**

This SPCC Plan is not required to be filed with the U.S. EPA. Per 40 CFR 112.3(e), a copy must be available for on-site review by the EPA Regional Administrator during normal working hours. The Plan is available for electronic review 24 hours per day on the Environmental Health and Safety website (<https://ehs.uconn.edu/environmental-programs/>). UConn maintains a physical copy of this Plan at the following addresses:

University of Connecticut  
Avery Point Regional Campus  
Facilities Department  
1084 Shennecossett Road  
Groton, Connecticut 06340

and

University of Connecticut  
Storrs Campus  
Environmental Health & Safety – Environmental Programs  
28 Professional Park Road  
Storrs, CT 06268

and

University of Connecticut  
Storrs Campus  
Facilities Operations  
25 LeDoyt Road, Unit 3252  
Storrs, CT 06269

### **1.7 Policy Statement**

As stated in the University's [Health and Safety Policy](#), UConn is committed to providing a healthful and safe environment and complying with federal and state health and safety standards. UConn is also committed to complying with all applicable environmental laws and regulations.

## **2.0 GENERAL SITE INFORMATION**

### **2.1 Campus Description (40 CFR 112.7(a))**

The University of Connecticut, Avery Point Campus is located at the end of Eastern Point Road on Avery Point in Groton, Connecticut. The peninsula on which the campus sits is bordered by the Thames River and Long Island Sound to the west, east, and south. Surrounding land use consists of industrial, commercial, and residential development. The campus consists of approximately fifteen buildings on 136 acres. The location of the Avery Point Campus is shown on **Figure 1** and the general layout of the facility and buildings is provided on **Figure 2**.

### **2.2 Oil Storage (40 CFR 112.7(a)(3)(i))**

In general, spill prevention at the Avery Point Campus is focused on the delivery and bulk storage of Ultra Low Sulfur Diesel (ULSD) in aboveground storage tanks (ASTs). ULSD is used to power emergency generators at the Central Utilities Plant (CUP), the Marine Science Building, and the Branford House. Most buildings on campus are heated by natural gas except for the Security Building, which is heated by propane.

In addition, elevator hydraulic oil tanks are located in the Branford House, the Marine Science Building, the Library, the Academic Building, and the Project Oceanology Building. Miscellaneous chiller and vessel lube oils are stored in 55-gallon drums at the CUP. Waste oil and anti-freeze generated from the maintenance of the Marine Science vessel is stored securely in 55-gallon drums outside the Marine Operations Dive Locker. Waste grease is stored in a 150-gallon tank outside the Student Union. There are no trash compactors (or associated hydraulic oil reservoirs) on the Avery Point Campus with a capacity greater than the 55-gallon threshold. The City of Groton, Department of Utilities maintains thirteen oil-filled electrical transformers on the campus for which they maintain a spill response procedure.

### **2.3 Facility Drainage (40 CFR 112.8(b) and 112.12(b))**

The UConn Avery Point stormwater drainage system and the inferred direction of oil spills for those areas of the campus involving the storage and/or use of oil products in undiked areas are shown on **Figure 2** and described below (40 CFR 112.8(b)[3]). In general, stormwater is collected via catch basins and discharges through the storm sewer drainage system to Long Island Sound to the east and west. Stormceptors® (oil/water separators) were installed to allow for the separation of oil and collection of floating debris prior to discharge into Long Island Sound. According to facility personnel, each Stormceptor® can hold up to approximately 1,000-gallons of oil. Stormceptors® and oil/water separators are pumped out every year. The fuel loading area for the 500-gallon AST at Branford House would drain to the south towards Long

Island Sound. The fuel loading area for the 500-gallon AST at Marine Science Building eventually would drain to a Stormceptor® located to the north of the Project Oceanology Building. Stormwater effluent drains to the Long Island Sound from the Stormceptor® directly behind Project Oceanology. The fuel loading area of the 500-gallon AST at the CUP drains to another Stormceptor® located to the east of the Gymnasium and then discharges to Long Island Sound. Because the oil/water separators are intended only as secondary containment and do not regularly contain oil, their capacities are not included in the total oil capacity of the campus.

The facility is not equipped with diked storage areas which are subject to precipitation (40 CFR 112.8[b][1]), valves used on diked storage areas (40 CFR 112.8[b][2]), or treated water systems requiring pumping conveyance (40 CFR 112.8[b][5]). A diversion system that would retain oil within the facility is not required since the Avery Point Campus storm sewer system is equipped with oil/water separators capable of retaining a discharge of oil in the event of an uncontrolled release (40 CFR 112.8(b)[3] and [4]).

### **3.0 SPILL PREDICTION, PREVENTION, CONTROL, & COUNTERMEASURES**

In general, spills of oil may occur during tank filling operations, from slow leaks from tanks or piping, or due to unforeseen events such as mechanical failures or accidents involving breaches in fuel supply lines. According to UConn Building Maintenance Supervisor for Facilities Operations, there have not been any recorded spills on the UConn Avery Point Campus.

In addition to the general SPCC requirements of 40 CFR 112.7, onshore facilities (excluding production facilities) with petroleum and non-petroleum oils, excluding animal, fish, marine mammal and vegetable oils, must comply with the additional SPCC requirements outlined in 40 CFR 112.8. Onshore facilities that store or use animal fats, oils and greases and fish, marine mammal and vegetable oils, must comply with the additional SPCC requirements outlined in 40 CFR 112.12. Proper fuel loading and handling procedures (Section 5.0), regular maintenance and inspection of tank systems (Section 4.1), and security measures (Section 4.2)) are enforced as general prevention practices. General control measures include the use of tanks and containers that are compatible with the contents they hold (40 CFR 112.8[c][1] and 112.12(c)(1)). General countermeasure procedures are described in Section 7.0.

Specific physical descriptions, spill predictions, spill prevention practices, spill control measures, and spill countermeasures associated with each tank and storage container are described in the following Sections 3.1 through 3.5.

#### **3.1 Aboveground Storage Tanks**

The aboveground storage tanks on campus are listed below. Specific physical descriptions, spill predictions and spill countermeasures associated with each aboveground storage tank, spill countermeasures are explained within this section.

The following tanks serve emergency generators and contain Ultra Low Sulfur Diesel (ULSD). They are either outdoors double-walled belly tanks or tanks located inside a building:

- **AST-1:** One (1) 500-gallon ULSD emergency generator at the Central Utilities Plant (CUP)
- **AST-2:** One (1) 260-gallon ULSD emergency generator at the Branford House
- **AST-3:** One (1) 500-gallon ULSD emergency generator at the Marine Science Building

The facility also stores waste kitchen grease in a double-walled tank:

- **AST-4:** One (1) 150-gallon grease tank at the Student Union

### ***AST-1 Central Utilities Plant Emergency Generator***

#### General Description [112.7(a)(1)]:

Tank ID	<b>AST-1</b>
Capacity	500 gallons
Contents	ULSD
Construction	Double-walled steel
Location	Inside the generator room at the Central Utilities Plant (CUP). The fill and vent pipes extend out from the building's eastern exterior wall.
Surroundings	Concrete floor: there are no floor drains in the area of the tank and the tank is not near any doorways.
Use	Fuel source for generator

#### Spill Prediction [112.7(b)]:

Primary Container	Releases from the primary tank will be contained within the interstitial space between the inner and outer walls of the tank.
Transfer Piping	Releases from the transfer piping will be contained within the building.
Bulk Transfers	Spills and releases from filling of the tank would potentially discharge towards a storm drain (approximately 30 feet away). Up to 1,000 gallons of oil would be intercepted by the facility's Stormceptor on the drain outlet to Long Island Sound. Quantity could vary from small drips/leaks to tank/hose failure up to the entire contents of a single compartment of the fuel truck (5 to 4,200 gallons).

#### Spill Prevention Measures [112.7(a)(3)(ii)]:

Visual Inspections	Monthly (see Section 4.1)
Bulk Transfers	Tanker unloading (fuel delivery) procedures are conducted by an outside contractor. Tanker unloading operations are conducted in accordance with Section 5.1 of this plan. Should a spill/leak occur, UConn personnel are immediately notified.

#### Spill Control Measures [112.7(a)(3)(iii)]:

Secondary Containment [112.8(c)(2)]	Tank: Double-walled construction Piping: n/a
Overfill Protection	Yes, the tank fill is outfitted with a 13-gallon spill containment box to contain minor spills or releases during fuel deliveries.
Level gauge	Yes, visual float level gauge.
Alarms	Yes, visual basin rupture alarm at the tank. High/low level sensor with a visual/audible alarm at the CUP control panel.
Security	Fill port is locked

Spill Countermeasures [112.7(a)(3)(iv)]: Any spills or leaks from the double-walled tank will be identified, contained to the extent feasible, and will be promptly cleaned up by properly trained UConn Facilities staff or an outside spill response contractor in accordance with Section 7.0 of this Plan.



## ***AST-2 Branford House Emergency Generator***

### General Description [112.7(a)(1)]

Tank ID	AST-2
Capacity	260 gallons
Contents	ULSD
Construction	Double-walled steel belly tank (oil compatible)
Location	Emergency generator outside the southeast corner of the Branford House building.
Surroundings	Landscaped grass. The nearest paved roadway is sloped slightly downward to the northeast. The closest down-gradient catch basin to the fill pipe is approximately 90 feet to the northeast of the roadway.
Use	Fuel source for generator.

### Spill Prediction [112.7(b)]

Primary Container	Releases from the primary tank will be contained within the interstitial space between the inner and outer walls of the tank.
Transfer Piping	Small to moderate releases from the transfer piping during deliveries will be absorbed by the surrounding landscaped area. Significant releases could flow overland to the paved area and storm sewer. Up to 1,000 gallons of oil would be intercepted by the facility's Stormceptor on the drain outlet to Long Island Sound.
Bulk Transfers	Small overfills will be contained by the spill basin at the fill port. Moderate overfills and leaks are expected to be absorbed by the surrounding soil. Significant overfills and leaks could flow to the south towards Long Island Sound. Quantity could vary from small drips/leaks to tank/hose failure up to the entire contents of a single compartment of the fuel truck (5 to 4,200 gallons).

### Spill Prevention Measures [112.7(a)(3)(ii)]

Visual Inspections	Monthly (see Section 4.1)
Bulk Transfers	Tanker unloading (fuel delivery) procedures are conducted by an outside contractor. Tanker unloading operations are conducted in accordance with Section 5.1 of this plan. Should a spill/leak occur, UConn personnel are immediately notified.

### Spill Control Measures [112.7(a)(3)(iii)]:

Secondary Containment [40 CFR 112.8(c)(2)]	Tank: Double-walled construction Piping: n/a
Overfill Protection	The tank fill is outfitted with a 13-gallon spill containment box to contain minor spills or releases during fuel deliveries.
Level gauge	Visual float level gauge.
Alarms	Low level visual and audio alarm at the tank site and at remote annunciator in the Branford House.
Security	Fill port is locked.

Spill Countermeasures [112.7(a)(3)(iv)]: Any spills or leaks from the double-walled tank will be identified, contained to the extent feasible, and will be promptly cleaned up by properly trained UConn Facilities staff or an outside spill response contractor in accordance with Section 7.0 of this Plan.

### ***AST-3 Marine Science Building Emergency Generator***

#### General Description [112.7(a)(1)]:

Tank ID	AST-3
Capacity	500 gallons
Contents	ULSD
Construction	Double-walled steel (oil compatible)
Location	Marine Science Building, northeast corner of ground floor.
Surroundings	An eight-inch high containment berm in front of the tank; the building's walls surround the rest of the tank. There are no floor drains in the area of the tank and the tank is not near any exterior doorways.
Use	Fuel source for emergency generator

#### Spill Prediction [112.7(b)]:

Primary Container	Releases from the primary tank will be contained within the interstitial space between the inner and outer walls of the tank.
Transfer Piping	Releases from the transfer piping will be contained within the building.
Bulk Transfers	Small overfills will be contained by the spill basin at the fill port. Moderate overfills and leaks are expected to be absorbed by the surrounding gravel. Significant overfills and leaks or releases from the tanker delivery truck could flow towards the nearest catch basin. Up to 1,000 gallons of oil would be intercepted by the facility's Stormceptor on the drain outlet to Long Island Sound. Quantity could vary from small drips/leaks to tank/hose failure up to the entire contents of a single compartment of the fuel truck (5 to 4,200 gallons).

#### Spill Prevention Measures [112.7(a)(3)(ii)]:

Visual Inspections	Monthly (see Section 4.1)
Bulk Transfers	Tanker unloading (fuel delivery) procedures are conducted by an outside contractor. Tanker unloading operations are conducted in accordance with Section 5.1 of this Plan. Should a spill/leak occur, UConn personnel are immediately notified.

#### Spill Control Measures [112.7(a)(3)(iii)]:

Secondary Containment [40 CFR 112.8(c)(2)]	Tank: Double-walled construction Piping: n/a
Overfill Protection	The tank fill is outfitted with a 5-gallon spill containment.
Level gauge	Visual float level gauge.
Alarms	Continuous tank monitoring system provides visual low-level alarm, high level alarm, and rupture basin alarm at the tank.
Security	Fill port is locked

Spill Countermeasures [112.7(a)(3)(iv)]: Any spills or leaks from the double-walled tank will be identified, contained to the extent feasible, and will be promptly cleaned up by properly trained UConn Facilities staff or an outside spill response contractor in accordance with Section 7.0 of this Plan.

**AST-4 Student Union Grease Tank**General Description [112.7(a)(1)]

Tank ID	AST-4
Capacity	150 gallons
Contents	Kitchen Grease
Construction	Double-walled plastic
Location	Under the exterior stairs to the west of the Student Union.
Surroundings	Concrete pad adjacent to asphalt driveway. Closest catch basin is 20 feet to the east.
Use	Waste kitchen grease

Spill Prediction [112.7(b)]

Primary Container	Releases from the primary tank will be contained within the interstitial space between the inner and outer walls of the tank.
Transfer Piping	n/a
Small Transfers	Small spills during manual transfers to and from the tank are not expected to exceed 5 gallons. Any spill would be cleaned up by transfer personnel or would be captured by oil water separators located downstream of the catch basin.
Bulk Transfers	Tank overturn or damage by mishandling or vehicle/equipment impact. The maximum that could be released is 150 gallons if the tank was full and ruptured at the bottom.

Spill Prevention Measures [112.7(a)(3)(ii)]

Visual Inspections	Monthly (see Section 4.1).
Bulk Transfers	Tanker loading procedures to pickup waste grease are conducted by an outside contractor. Tanker loading operations are conducted in accordance with Section 5.1 of this Plan. Should a spill/leak occur, UConn personnel are immediately notified.

Spill Control Measures [112.7(a)(3)(iii)]

Secondary Containment [40 CFR 112.12(c)(2)]	Tank: Double-walled construction Piping: n/a
Overfill Protection	None
Level gauge	Visual level can be seen on the exterior of the tank
Alarms	None
Security	The tank is located in a well-lit area and concealed from the general public.

Spill Countermeasures [112.7(a)(3)(iv)]: Any spills or leaks from the double-walled tank will be identified, contained to the extent feasible, and will be promptly cleaned up by properly trained UConn Facilities staff or an outside spill response contractor in accordance with Section 7.0 of this Plan.

### 3.2 Drums

#### ***D-1 Marine Operations Drum Storage***

General Description [112.7(a)(1)]:

Tank ID	D-1
Capacity	Variable up to twelve (12) x 55-gallons (660 gallons, max)
Contents	Waste oil, engine oil, antifreeze, waste antifreeze
Construction	Single-walled Steel (oil compatible)
Location	Three drum storage lockers located outside of the Marine Operations building, each capable of storing four 55-gallon drums
Surroundings	Asphalt paved. The closest down-gradient catch basin is approximately 40 feet to the west.
Use	Raw/virgin and used oil for Marine Operations

Spill Prediction [112.7(b)]

Primary Container	Leaks from the drums will be contained by the secondary containment built into the drum storage lockers.
Transfer Piping	n/a
Small Transfers	Small spills during transfers to and from the drums are not expected to exceed 5 gallons and will be contained by the secondary containment built into the drum storage lockers.
Bulk Transfers	Drum overturn or damage by mishandling or vehicle/equipment impact. The maximum that could be released from each storage locker is 220 gallons if all drums were full and ruptured simultaneously.

Spill Prevention Measures [112.7(a)(3)(ii)]

Visual Inspections	Monthly (see Section 4.1).
Bulk Transfers	Drum handling is conducted in accordance with Section 5.2.2 of this Plan.

Spill Control Measures [112.7(a)(3)(iii)]

Secondary Containment [40 CFR 112.8(c)(2)]	In general, all drums are stored inside lockers equipped with at least 55-gallons of secondary containment capacity. Occasionally, excess drums are brought on-site and not all drums can fit in the lockers. This occurs when a major marine vessel maintenance activity is planned. When this happens, the extra drums are stored near the lockers on portable spill pallets that have at least 55-gallons of secondary containment capacity.
Overfill Protection	Spills due to overfill would be contained by spill pallets.
Level gauge	None
Alarms	None
Security	The drum storage lockers are locked and accessible by Marine Operations personnel only. The drums and spill pallets, when used, are covered with a tarp which is secured with a locked chain. The drum storage area is illuminated by a nearby light pole and exterior lighting on the Marine Operations building.

Spill Countermeasures [112.7(a)(3)(iv)]: Spills contained by the storage locker or spill pallet secondary containment will be cleaned either by properly trained UConn Facilities or Marine Science personnel or by an outside spill response contractor, in accordance with Section 7.0 of this Plan.

## **D-2 Central Utility Plant Drum Storage**

### General Description [112.7(a)(1)]:

Tank ID	D-2
Capacity	(2) x 55 gallons (110 gallons)
Contents	Engine and lubrication oil
Construction	Single-walled steel drum (oil compatible)
Location	Inside Central Utility Plant in garage/chiller room
Surroundings	Concrete floor
Use	Virgin oil materials

### Spill Prediction [112.7(b)]:

Primary Container	Drum overturn or damage by vehicles or equipment. A release from the drums will be contained by the spill pallet and the building's walls and floor.
Transfer Piping	n/a
Small Transfers	Small spills will be contained by the spill pallet and the building's walls and floor. Spills during transfers from the drums are not expected to exceed 5 gallons.
Bulk Transfers	Drum overturn or damage by mishandling or equipment impact. The maximum that could be released is 110 gallons if both drums were full and ruptured simultaneously.

### Spill Prevention Measures [112.7(a)(3)(ii)]

Visual Inspections	Monthly (see Section 4.1).
Bulk Transfers	Drum handling is conducted in accordance with Section 5.2.2 of this Plan.

### Spill Control Measures [112.7(a)(3)(iii)]

Secondary Containment [40 CFR 112.8(c)(2)]	Spill pallets have at least 55-gallon secondary containment capacity.
Overfill Protection	None
Level gauge	None
Alarms	None
Security	The drums are secured inside the Central Utility Plant.

Spill Countermeasures [112.7(a)(3)(iv)]: Any spills or leaks from the drums will be contained and will be properly cleaned up by properly trained UConn Facilities staff or an outside spill response contractor in accordance with Section 7.0 of this Plan.

### **3.3 Hydraulic Elevator Reservoirs**

UConn Avery Point maintains the following six hydraulically-operated elevators on the campus. Each elevator is equipped with a steel tank reservoir for hydraulic oil supply. The spill prediction, prevention, control, and countermeasures are the same for all hydraulic elevator tanks.

- **E-1:** Branford House - One, 180-gallon capacity
- **E-2 and E-3:** Marine Science Building - Two, 225-gallon capacity each
- **E-4:** Project Oceanology Building - One, 100-gallon capacity
- **E-5:** Academic Building – One 100-gallon capacity
- **E-6:** Library Building - One, 100-gallon capacity

#### Spill Prediction [112.7(b)]

In general, the most likely discharge of oils from hydraulic elevators would occur due to losses of hydraulic fluid within the piston unit or hydraulic lines and would discharge to the floor of the elevator rooms. In most cases, any release would be limited in volume to the capacity of the elevator tank and would be confined to the floors of the elevator rooms and adjacent rooms.

#### Spill Prevention Measures [112.7(a)(3)(ii)]

The hydraulic oil reservoirs are inspected annually, in accordance with Section 4.1 of this Plan.

#### Spill Control Measures [112.7(a)(3)(iii)]

There are no floor drains present in any of the first floor or basement elevator rooms. UConn coated the floors on the elevator rooms with epoxy and installed curbing at the doors to contain oil during a potential spill.

Uncontrolled spills and releases will be confined to the floors of the elevator rooms. A spill contractor will be called in to clean-up any significant release of hydraulic oil contained within the building in accordance with Section 7.

Should the release of hydraulic oil escape the building, it may flow over impervious pavement towards the nearest catch basin. Up to 1,000 gallons of oil can be contained by each Stormceptor unit that separates oil from stormwater discharged to Long Island Sound.

### **3.4 Transformers**

Thirteen (13) oil-filled transformers owned and operated and maintained by the City of Groton (Groton Utilities) are located at UConn Avery Point. UConn does not have access to these transformers, and the City maintains spill response procedures and will dispatch a representative to the transformer location to address reported oil spills and leaks from the transformer. UConn will report observed leaks or spills from the transformers to the City of Groton at (860) 446-4000.

### **3.5 Spill History**

According to UConn Avery Point records, all identified releases can be considered minor spills of petroleum substances (<1,000 gallons in a single discharge or two (2) 42-gallon discharges in a twelve month period) with no known releases to navigable waterways from SPCC regulated tanks and activities. Even though fuel transfers from a mobile refueler and vessels are not regulated under the SPCC rules, the facility maintains records of all spills within its jurisdiction. There were two noted spills within the five years preceding this Plan as described below:

- On May 10, 2017, there was a minor diesel fuel leak from the saddle tank of a vehicle associated with a construction project at the campus. The leak occurred on pavement and was absorbed with Speedy Dry and properly disposed of. The event was reported to DEEP.
- On November 13, 2017, there was a release of approximately 30 gallons of diesel fuel from UConn's Marine Science vessel that was released directly into the Long Island Sound near the shore. The spill was reported to DEEP and the National Response Center. The Coast Guard responded to the event. Absorbent booms were deployed to contain and absorb the oil floating on the surface of the water. Weather conditions were favorable for spill containment/cleanup. Booms remained in place until the Coast Guard deemed the cleanup complete. As a conservative measure, UConn deployed new absorbent booms closer to shore after the original ones were removed to catch any additional oil released from the rocks at the shoreline.

## 4.0 INSPECTIONS AND SECURITY

### 4.1 Inspections, Tests, and Records (40 CFR 112.7(e))

UConn Avery Point must ensure that the required inspections are accomplished and that the appropriate documentation and reports are prepared.

#### ***Aboveground Storage Tanks (ASTs)***

UConn Avery Point conducts an inspection and monitoring program following the Steel Tank Institute's (STI) *Standard for Inspection of Aboveground Storage Tanks* [STI SP001 (January 2018), 6<sup>th</sup> Edition] with recommended deviations by the professional engineer. Based on the visible and secure locations of the tanks, secondary containment, alarm systems, and the results of prior inspections, inspections of the aboveground storage tank systems are conducted by either UConn personnel or an outside contractor on a monthly basis. One of the monthly inspections must include all additional, relevant tank elements listed on the STI annual inspection checklist. The inspections must be completed by an experienced and qualified inspector. The inspector can recommend appropriate repairs to the tank system(s) or increases to the tank inspection frequency as warranted by the findings of the inspections.

Inspections must include the following:

Inspect	Evaluate for...
Exterior surfaces of tanks, pipes, valves, and other equipment (valves and piping, including flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces)	Cracks, areas of wear, corrosion and thinning, leaks, maintenance deficiencies, excessive settlement, separation or swelling of tank insulation
Leak detection systems, cathodic protection monitoring equipment, or other monitoring or warning systems	Proper function
Tank supports and foundations	Structural and foundation weaknesses
Tank gauges to ensure they are in place	In place and functioning properly
Condition of secondary containment	Intact and no fluid
Drain plugs	In place, if present, secured and tight
Security measures (e.g.,)	Fill box covers locked, adequate lighting
Spill response equipment	Present and fully stocked
Stormceptors (Oil-water separators)	Shoen, measurable petroleum product, accumulated grit

The Oil Pollution Prevention regulations require that inspections and tests be conducted in accordance with written procedures that are developed by the facility or certifying engineer. The monthly Aboveground Storage Tank Inspection Checklist is provided in **Appendix A**. The inspection log sheets must be completed and signed by the person conducting the inspection. The signed inspection log sheets are maintained in the electronic files at Environmental Health & Safety (EHS) – Environmental Programs



where there is also a physical copy of this SPCC Plan. A record of inspections and tests, signed by the appropriate supervisor or inspector, must be kept with the SPCC Plan for a period of three years (40 CFR Section 112.7(e)).

### ***Aboveground Tank Periodic Integrity Testing***

In accordance with STI SP001, the ASTs at the UConn Avery Point Campus do not require periodic integrity testing due to their size and construction. However, in addition to visual inspections of the aboveground oil storage tank systems, bulk storage containers must be tested for integrity whenever material repairs are made. Monthly visual inspections will be sufficient in detecting conditions that pose a risk to the environment.

All bulk container testing records must be kept for the life of the container. The Facility Operations Manager must maintain comparison records of visual and integrity tests. This facility must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation or replacement.

### ***Drum Storage***

Based on the visible and secure locations of the drums and drum storage, UConn Avery Point visually inspects the condition of the drums and drum storage areas on at least a monthly basis. Drums that are found to show signs of leakage, dents, or corrosion, or are in any way compromised are replaced immediately upon discovery. Visual inspections of drum storage areas are sufficient and meet SPCC requirements based on their secure locations, secondary containment and the frequency that UConn personnel manage these oil drums. The monthly Drum Inspection Checklist is provided in **Appendix A**.

### ***Elevators***

Based on the design of the elevator shaft sumps and their capability to contain any oil discharges from the elevator piston system, Otis Elevator Company inspects the elevators on an annual basis.

## **4.2 Security (40 CFR 112.7(g))**

The Avery Point Campus is staffed 24 hours per day, 7 days per week by at least one UConn police officer. The CUP is staffed 16 hours per day, 7 days a week. The fill pipes for the ASTs are equipped with locking fill caps. The storage lockers for the Marine Operations drum storage are locked. Facility lighting is adequate to assist in the discovery of discharges during hours of darkness and to prevent discharges occurring through acts of vandalism.

## 5.0 OIL HANDLING PROCEDURES

### 5.1 Tank Car/Truck Loading/Unloading Rack (40 CFR 112.7(h))

The UConn Avery Point Campus does not have any tank car/truck loading/unloading racks; therefore, the requirements of 40 CFR 112.7(h) are not applicable.

### 5.2 Loading/Unloading Areas (Transfer Areas (40 CFR 112.7(a)(3)(ii))

Tank truck unloading operations (diesel fuel delivery) take place at three tanks at UConn Avery Point and tank loading (waste oil removal) occurs at one tank.

Tank	Contents	Delivery Frequency	Transfer Description
AST-1, Central Utility Plant, 500-gallon capacity	ULSD	Once per year	Tank truck parks on the paved service drive between the CUP and gymnasium. Fuel is transferred approximately 20-feet over the landscaped area between the truck and fill pipe.
AST-2, Branford House, 260-gallon capacity	ULSD	As needed, infrequent	Tank truck parks on the paved roadway to the east of Branford House. Fuel is transferred approximately 20-feet over the landscaped area between the truck and the generator.
AST-3, Marine Science Building, 500-gallon capacity	ULSD	As needed, infrequent	Tank truck parks on the paved roadway next to fill pipe. Fuel is transferred approximately 5-feet over the landscaped area between the truck and fill pipe.
AST-4, Student Union Grease Tank, 150-gallon capacity	Waste Grease	As needed, infrequent	Tank truck parks on the paved roadway next to tank. Grease is transferred over paved area approximately 10-feet to truck.

Tanker unloading operations are conducted by outside supplier/vendor delivery personnel and overseen by UConn personnel. Upon arrival at the facility, the tank truck driver must notify UConn personnel. UConn personnel provide access to the tank fill location, verify the fuel delivery amount, and ensure that there is adequate spill control equipment present in the event of a spill during fueling. A portable spill dike and/or catch basin drain blocker mat is used at each of the AST fill locations to protect nearby receptors. In the event of a release from the fuel delivery truck or overfilling of the tanks, these devices will aid in preventing spilled fuel oil from entering the storm drainage system. Tank gauges and fuel levels are inspected by both UConn personnel and the tank truck driver prior to filling to ensure that the volume available in the tank is greater than the volume of fuel to be transferred. During the transfer of fuel to the storage tanks, continuous inspections of the tank truck and the receiving tank are conducted to reduce the potential for spillage and overfilling to occur.

The driver must follow these practices during all bulk fueling operations:

General:

1. Park vehicle as close as possible to the fill pipe or tank and use the minimum length of hose possible to complete the connection.
2. Verify that the temporary spill containment structures have been installed as required.
3. Verify that the emergency spill containment equipment is fully stocked at a nearby accessible location.

Prior to Transfer:

1. Visually check all fuel transfer hoses for leaks and wet spots.
2. Keep hose ends tightly capped while moving hoses into position.
3. Determine tank capacity by level indicator or taped measurement and tank gauge chart. Verify that sufficient volume is available in the storage tank.
4. Secure the loading vehicle prior to transfer operations with physical barriers such as wheel chocks and interlocks. Make sure that the parking brakes of the tank truck are set.

During Transfer:

1. Shut off motors or auxiliary or portable pumps when making and breaking hose connections.
2. Monitor all hoses and hose couplings for leaks.
3. Monitor the liquid level in the receiving tank during filling operations to prevent overflow.
4. Do not top off tank. Provide a minimum of 5% free space within the tank to prevent leakage due to thermal expansion.

After Transfer:

1. Close all tank and vehicle valves before disconnecting.
2. Prior to vehicle departure, make sure that all connections and fill lines are disconnected.
3. Inspect the outlets for evidence of leakage.
4. Make sure that the hoses or other connecting devices are drained, vented, or blown down to remove the remaining fuel before moving them away from their connections.
5. Use a drip pan, pail, and/or oil absorbent pads when breaking a hose connection.
6. Cap the end of the hoses or other connecting devices before moving them to prevent uncontrolled fuel leakage.
7. Soak up any spilled or dripped oil from in or around the fill box and secure the fill box cover.
8. Properly dispose of any used clean-up material generated during fuel transfer.

### **5.3 Facility Transfer Operation, Pumping and Facility Process (40 CFR 112.8(d) and 112.12(d))**

Requirements that apply to valves, appurtenances, piping, and transfer operations at onshore facilities that handle petroleum oils are described in Section 112.8(d). Similar requirements are described in Section 112.12(d) for piping at onshore facilities that handle animal fats and/or vegetable oils. These provisions of the SPCC rule require that owners and operators of facilities generally protect buried piping against corrosion; cap or blank-flange the terminal connection of piping that is not in service; design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction; regularly inspect all aboveground valves, piping, and appurtenances; and take corrective action when corrosion damage is found. The rule also requires integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement. Finally, the rule requires warning all vehicles entering the facility to ensure that they will not endanger aboveground piping (or other oil transfer operations).

There is no underground oil piping at UConn Avery Campus. Types of piping at UConn Avery Campus addressed by this provision include:

- ULSD deliveries to AST-1 and AST-3 (permanent and temporary piping)
- Emptying of grease from AST-4 (temporary piping)
- Drums (temporary piping)

Facility transfer operations are generally limited to the conveyance of oil from the fill ports to the associated tanks and from the tanks to the associated fuel-burning equipment (generators). Unusual conditions, leaks, or other problems with piping and valving will be documented during the monthly visual tank inspections and immediately corrected. Fuel transfer piping servicing these ASTs is located in such a manner that damage due to vehicular traffic is unlikely.

Aboveground piping and valves associated with generator operations at the facility are visually inspected on a monthly basis. Unusual conditions, leaks, or other problems with piping and valving would be documented in the facility's log maintained by personnel at the facility. In addition, the piping is in highly visible areas and a fuel leak would be seen by facility personnel during routine operations.

Other transfers in association with grease containers and drums are primarily manual. Unusual conditions, leaks, or other problems will be discovered immediately. Drum loading/unloading procedures are described in Section 5.4.

#### **5.4 Ship-to-Shore Fueling Procedures**

In addition to fueling the ASTs on campus, Avery Point also has two research vessels, the R/V Connecticut and the R/V Lowell Weicker that are filled on an as needed basis from a tanker truck. All vessels, including transfer operations from commercial tank trucks to the vessels, are exempt from SPCC requirements per Section 112.1(d)(1)(iii) and regulated by United States Coast Guard. However, as a best management practice, ship fueling transfer procedures are documented within this SPCC.

##### **R/V Connecticut Fueling Procedures**

The R/V Connecticut is a 90-foot research vessel and equipped with three (3) built-in steel fuel tanks and one day tank having a total capacity of 6,649 gallons. All tanks are filled from a single fueling station through a single fill pipe. This fueling station is equipped with a containment dam. The lowest fuel vent is also vented in the containment. Each fuel tank is equipped with visual and audible alarms that are triggered before the tank reaches 100% full.

Fueling operations are always conducted with three attendants. Only the Master and Engineer of the vessels are qualified to oversee fueling operations. In addition to the Master or Engineer, one member of the vessel's crew and the fuel truck driver are required to attend fueling operations. The Master or Engineer remains on deck constantly monitoring the tank level by reading the gauging tube and relaying information between the truck and engine room via radios; the crew member who is assisting monitors the fuel manifold and alarms in the Engine Room; and the driver stands by the truck operating the pump and is ready to shut the pump down in an emergency. Spill mitigation equipment and emergency contact phone numbers are located on board the ship.

##### **Prior to Transfer:**

1. Gauge the three storage tanks with a measured stick and tables. The calibrated tables show the amount of fuel in a given tank corresponding to the observed height measured off the stick from the bottom of the tank. The stick measurements are taken through a gauging tube in each of the fuel oil storage tanks. The tables are in the "R/V Connecticut Lengthening Lightship Weights and Stability" booklet. Vessel should be trimmed as level as possible for this procedure.
2. Test tank alarms prior to fueling. Move shore side spill containment to the pier near the gangway. Put the drain plugs in the spill containment, place 5-gallon pails at the F/O tank vents on the 01 deck and boom off the area around the spill containment. Relocate the shipboard spill kit to the central deck by the gangway. All hot work, smoking and non-related activities must be stopped.

#### During Transfer:

1. Arrival of the fuel truck: Driver chocks tires, then connects the truck hose with the vessel's fueling header. At this point all three persons involved with the transfer – the driver, the Master or Engineer, and the additional crew member – have a conference to go over the checklist on the Vessel's Fueling Log Sheet, the level at which transfer flow slowdowns for topping off will occur, and planned shutdowns. The meter on truck may be preset.
2. Once all parties are in place, the truck driver opens the header valve and begins transfer of fuel.
3. During fueling one crew member is in the engine room monitoring the fueling manifold and the tank alarm panel. The person in charge of the transfer (Master or Engineer) is gauging the tank that is being filled and will call for slowdowns for topping off. The driver continually monitors the hose connection at the vessel's header, controls the transfer flow and the shutdown switch at the hose.
4. The procedure is to fill one tank at a time including topping off, stopping the transfer to switch the transfer hose to the next tank. Before resuming transfer flow, the fuel level of the tank to be filled is double checked; the water around the vessel is visually inspected for a sheen or slick (signs of a possible leak in the tank); if needed, ballast is transferred to level off the vessel; and radio communication is rechecked. ***(Note: anyone on site has the authority to call for a shutdown of fuel transfer and no reason needs to be given. To resume transfer, the crew member in charge as well as the fuel company's driver need to be in agreement that it is safe to restart the transfer).***
5. The vessel's day tank does not have a gauging tube; therefore, when filling this tank, the level is observed using the sight glass while the fuel transfer proceeds at a slow rate. Transfer flow is stopped at the day tank when the sight glass reads 500 gallons.

#### After Transfer:

1. When fueling is complete for all tanks, the valve to the last tank is kept open at the manifold to help drain the truck hose back.
2. Once the hose is drained, the tank valve at the manifold and the header valve on deck are secured, then the hose connection from the deck's header valve is removed and capped.
3. Once the hose is safely stored on the truck, the driver must double check that the truck's tank valve is securely closed. Then one crew member helps guide the fuel truck off the pier and double checks the waters around the vessel, ensuring that no oil sheen is present.
4. After the truck leaves and a little time has passed, remove the plugs from the spill containment and break down the deck boom. Dismantling of the containment is delayed in case the tanks burp after fueling.

#### **R/V Lowell Weicker Fueling Procedures**

Avery Point also has a 39-foot research vessel, R/V Lowell Weicker. The R/V Lowell Weicker is equipped with one standalone aluminum fuel tank which is split into two equal 115-gallon compartments, for a total

capacity of 230 gallons. The tank is located below the main deck. For the purpose of this plan, each compartment is considered a separate tank. Each tank has its own deck fill located on port side of the vessel. Vents for each tank are located next to the corresponding fill pipe inside of the rail. The tank levels are continuously monitored by electric gauges located in the pilot house by helm station. In case of an accidental spill, emergency spill mitigation equipment and emergency contact phone numbers are located on board the ship.

Prior to Transfer:

1. Calculate approximately how much fuel is needed based on engine hours since last fueling and a rate of 20 gallons/hour. Compare the result to the reading on the fuel gauges.
2. All hot work, smoking and unrelated activities must be stopped.
3. Place small containment containers under each vent.
4. Block scuppers/deck drains with fuel absorbent pads.
5. Conduct a meeting with the truck driver/pump operator and crew to assign and clarify duties. The driver operates the pump and remains with the truck throughout fuel transfer. One crew member must be assigned to the pilot house to monitor fuel gauges. Another crew member must manage the hose nozzle at the tank fill. Radios will be used for efficient communication between parties.

During Transfer:

1. The person managing the hose nozzle must place a fuel absorbent pad around the exposed part of the nozzle. Never leave the nozzle on automatic operation mode.
2. The truck/pump operator watches the pump and verbally relays gallon amounts dispensed in 10-gallon increments.
3. Throughout fueling, a crew member must watch the electric gauges and alert other team members when the tank is approaching capacity, leaving some room for expansion due to temperature. Fueling stops when this person indicates tank is “full”.

After Transfer:

1. Once the pump is stopped, drain the hose into the containment. Carefully remove the hose from the vessel with its end capped to prevent leakage of residual product.
2. Allow containment pails to remain under the tank vents until the team is confident that no tank burping is occurring.
3. Record the total gallons dispensed in the log.

### **5.5 Drum loading/unloading**

Activities involving drum loading and unloading are performed at UConn's Avery Point Campus and it is UConn's policy that such activities be conducted in accordance with the following general procedures and practices, as applicable:

1. Drum covers are secured and tightened prior to moving.
2. Surrounding floor is clean and dry prior to removing drums from pallets or placing drums on pallets.
3. Ramps and proper tools (i.e., dollies, forklifts) are used to lift drums from top of pallets onto ground level (or vice versa).
4. Tools that could puncture or perforate the drum are not used during drum movement.
5. Catch basins, floor drains and drainage pathways are protected with booms and/or drain covers/mats during drum loading/unloading activities.



## **6.0 PERSONNEL TRAINING (40 CFR 112.2(f))**

UConn's Environmental Health and Safety Division is responsible for properly instructing UConn Avery Point personnel who handle oil and those who provide direction to oil handling personnel, such as managers and supervisors. Training is provided once a year on oil discharge prevention, control, and emergency response. UConn personnel who are responsible for accompanying the fuel supply vendor during fueling operations, and the regular inspection and maintenance of the tank systems are trained in the tank loading procedures, the use of the spill containment/response equipment, and the proper spill notification and reporting procedures. These personnel should also be familiar with this SPCC Plan as well as its location at the facility to ensure that, in the event of a spill, they are capable of following the appropriate procedures for spill response and reporting. Personnel SPCC training should be conducted for the above-identified personnel and whenever new personnel are assigned the above responsibilities. New personnel receive training prior to accepting responsibility over any oil handling responsibilities.

Records of SPCC training and briefings shall be maintained by UConn Facility Operations, and the Marine Science department for their respective personnel. UConn's Environmental Health and Safety Division will maintain copies of all records to document compliance with these requirements.

A sample copy of the personnel training and training log sheets are included in **Appendix B**. Actual training documents and training logs are maintained in EHS's electronic files. They are available upon request.

## **7.0 SPILL RESPONSE (40 CFR 112.7(a))**

### **7.1 Overview**

The UConn Avery Point Campus police, the City of Groton police, and the City of Groton fire department are the primary emergency response providers and respond to oil spills, regardless of quantity, 24 hours a day. If a major oil release occurs at the facility, the UConn Avery Point Campus would contact one of several spill response contractors. Trained UConn personnel may respond to small leaks or spills that do not pose a significant risk to health or safety and can be cleaned up easily.

### **7.2 Reporting a Discharge**

For any spill that occurs at the UConn Avery Point Campus, the Avery Point Facilities Manager and Environmental Health & Safety should be immediately notified. Spill Coordinator is a fluid term. At any given time, the Spill Coordinator will be the highest ranking official on-site during the emergency response. Generally, the Fire Chief or highest-ranking fire department officer would assume the role of Spill Coordinator once present. Prior to the arrival of the fire department, Avery Point personnel or UConn EHS personnel would assume the role. Please find the contact information below:

<b>Name/Department</b>	<b>Title</b>	<b>Phone Number</b>
Ben Roccapriore	UConn Avery Point Facilities Manager	Office: 860-405-9199
Turner Cabaniss (marine spills)	UConn Manager of Marine Operations	Office: 860-405-9178
UConn Campus Police	UConn Campus Police	860-486-4800
City of Groton Police	City of Groton Police	911
City of Groton Fire Department	City of Groton Fire Department	911
Paul Ferri, Environmental Health & Safety	Manager – EHS Environmental Programs	Office: 860-486-9295 Cell: 860-573-7842
Terri Dominguez, Environmental Health & Safety	Director of Environmental Health and Safety	Office: 860-486-0981 Cell: 860-234-3514

Spill response procedures are summarized on the Emergency Action Procedural Flow Diagram provided in **Appendix C**. Additionally, a copy of the Public Safety/EHS after-hours communication decision chart can be found in Appendix C. If an oil release is identified or caused by an UConn employee or contract vendor on UConn property, and it is safe to do so, perform the following:

- Secure all systems
- Close all valves necessary to contain oil in the delivery truck or storage tank
- Lock-out power to deliver pumps and other sources of ignition (leave ventilation equipment operating)
- Place absorbent booms, pads and catch basin drain blocker mats to keep oil from entering drainage systems

Upon being notified of the release, the Spill Coordinator/Facilities Manager will proceed to the scene of the event and obtain the following information from the spill notifier:

- Time of discharge
- Injury to personnel
- Nature of the spill or leak including source and cause
- Materials involved
- Location of the spill or leak
- Whether the release is ongoing
- Extent of the spill or leak, the approximate amount spilled, and the direction the liquid flow is moving
- Actions being used to stop, remove, and mitigate the effects of the discharge
- Names of individuals and/or organizations who have also been contacted

### **7.3 Spill Control Equipment**

Emergency spill control and response equipment are available at the following locations as shown on **Figure 2:**

- Marine Science building (north end of building near the emergency generator and drums)
- Marine Science building (south end of building near the elevator tank)
- Waterfront (next to drum storage lockers)
- Central Utility Plant
- Student Union (adjacent to waste grease tank)

Spill kits are available to contain small spills from the tanks and tanker trucks during unloading operations. The following is a list of spill control equipment in each kit:

- Speedy-Dry (or ShopDri Floor Sweep)
- Oil sorbent booms
- Oil sorbent pads
- Portable spill dike
- Catch basin drain blocker mat (if spill kit and tank location is close to a catch basin)
- Disposal bags

#### **7.4 Control Release of Oil**

The Facilities Manager, or designee, shall fully evaluate the spill event and make a determination as to whether the spill may be addressed using properly trained facility staff and on-hand spill response material or whether outside clean-up assistance is necessary.

If the spill is of a known oil product (e.g., ULSD) and the individual identifying the release has been trained on the use of the spill containment equipment (i.e., attended annual discharge prevention training per Section 6.0), and the individual can control the spill at the time of the release without endangering themselves or any other person in any way, then the individual shall take immediate action to control the release. If the spill is of a chemical or an unknown substance, the individual identifying the release shall alert the individuals in the area, restrict access to the area of the spill, and contact the Facilities Manager, or designee for further evaluation and response actions. Hazardous material spill response is beyond the scope of this SPCC Plan; however, the UConn or local emergency services are equipped to direct such efforts and should be contacted immediately.

For a spill or leak that is small enough to be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area or by maintenance personnel, and does not pose an adverse exposure hazard to employees, then the spill will be handled in the following manner:

1. Make sure all unnecessary persons are removed from the hazard area. Workers involved in the cleanup shall put on protective clothing and equipment (e.g., gloves, safety glasses).
2. If flammable vapors may be generated, remove all ignition sources, and use spark- and explosion-proof equipment and clothing during containment and cleanup.
3. If possible, try to stop the leak. Use absorbent pads, booms, earth, sandbags, sand, and other inert materials to contain, divert, neutralize and cleanup the spill. If spilled material reaches or threatens a storm sewer, try to stop the flow from the source by using diking, booms, mats, absorbent pads, sand, earth, sandbags, etc.

#### **7.5 Emergency Response**

For spills or leaks that cannot be controlled by facility resources, or for events beyond the capability of facility staff, the Spill Coordinator shall initiate the following procedures.

1. Contact emergency response including UConn police department and Groton police and fire departments. If any personnel are injured, call 911 for ambulance service.
2. For any fire, contact the Groton Fire Department.
3. Contact the Facilities Manager.
4. Contact Environmental Programs via Facilities Manager.

5. Contact one of the private emergency response contractors listed below and dispatch emergency personnel to the site to take appropriate action.
6. Contact the proper authorities to report the spill or release as indicated in Section 7.7 and 7.8.

#### **7.6 Disposal of Clean-up Material**

1. Place all containment and cleanup materials in appropriately labeled drums or other suitable containers and store in a secure indoor or weather-protected location for proper disposal.
2. Place all recovered liquid wastes in appropriately labeled drums in a secure indoor or weather-protected location for removal to an approved disposal facility.
3. Contact UConn Environmental Health & Safety (860-486-3613) to arrange for proper disposal.
4. **Following cleanup, all emergency equipment and spill containment equipment shall be returned to ready status (restocked).**

Please see **Appendix D** for a list of UConn-approved Spill Response contractors.

#### **7.7 Discharge Notification**

The Spill Coordinator will be responsible for ensuring that necessary spill reporting (oral and/or written) to the appropriate regulatory authority is completed. In some cases, fire department personnel might make these notifications on behalf of UConn; however, EHS – Environmental Programs shall confirm that this has been done and report the spill if necessary. All spills reaching Long Island Sound require additional notification to the National Response Center (*See Federal Spill Reporting* below).

#### ***Connecticut DEEP Spill Reporting***

Per Chapter 446k, Section 22a-450, the State of Connecticut requires immediate (within two hours) verbal reporting to the Connecticut Department of Energy & Environmental Protection (CT DEEP) of a spill in any quantity of oil, chemical products or hazardous materials if the release poses a potential threat to human health or the environment. CT DEEP has not established minimum quantities for hazardous materials below which spill reporting is not required. [Note: DEEP is planning to update their release reporting regulations in 2021 to define threshold amounts for releases of oil, petroleum, chemical liquids and harmful hazardous wastes. Until those regulations are adopted, all releases are to be reported.] Specifically, per CGS 22a-450, should a release, discharge, spillage, uncontrolled loss, seepage, or filtration of oil, chemical products or hazardous wastes occur from a ship, boat, barge, or other water vessel, from a terminal (docking area) used for loading or unloading, or from any vehicle, trailer, other machine, or tank, immediate verbal notification must be made to:

**Connecticut Department of Energy & Environmental Protection  
Oil and Chemical Spill Response Division  
Phone: (860) 424-3338  
24-Hour #: (860) 424-3333**

A copy of DEEP's Report of Petroleum or Chemical Product Discharge, Spillage or Release is included in **Appendix F**. Unless specifically requested, the CT DEEP does not require submittal of a written report following a spill. If requested by CT DEEP, the report must be completed and mailed to the address listed on the Spill Report form. Copies of the report provided to CT DEEP will be kept on file with UConn's EHS – Environmental Programs and with the UConn Avery Point Facilities Operations office.

Additional environmental hazard reporting may be required to comply with Connecticut Public Act (PA) 98-134. In general, the CT DEEP is notified when a determination is made that there is an environmental hazard above specific levels or concentrations involving contamination. In the event of a larger spill, UConn's EHS – Environmental Programs will review the additional Connecticut spill reporting requirements and take appropriate steps to ensure UConn's compliance with them.

***Federal Spill Reporting***

In the event that a spill of oil has reached navigable waters in harmful quantities, as defined in Section 1.0 of this document and in accordance with federal regulations (40 CFR Section 110.6), the federal National Response Center (NRC) must be immediately notified.

**National Response Center (NRC)  
24-Hour #: (800) 424-8802**

When contacting the NRC, provide the following information :

- Time, location, and source of the spill,
- Type and quantity of material spilled,
- Cause and circumstances of the spill,
- Hazards associated with the spill,
- Personal injuries,
- Corrective action taken or planned to be taken,
- Name and telephone number of individual reporting the spill, and
- Any additional pertinent information.

Contact the United States Environmental Protection Agency (EPA) Region I Response Center immediately for any spill that reaches navigable waters (per 40 CFR 110.6) at the following number:

**U.S. EPA Region I Response Center**

**24-Hour #: (617) 223-7265**

**Toll Free #: (888) 372-7341**

In addition to the above requirements, within 60 days a report shall be filed with the US EPA if either of the following criteria applies to the spill (per 40 CFR Section 112.4):

- a. more than 1,000 gallons of oil were discharged into or upon the navigable waters of the United States or adjoining shorelines in a single spill event, or
- b. more than 42 gallons of oil were discharged in each of two discharges in harmful quantities, into or upon the navigable waters of the United States or adjoining shorelines occurring within any 12-month period. Note that the 12-month period is a rolling period. This means that each discharge described herein triggers the start of a new 12-month period.

Should this facility fall under this provision, UConn's EHS – Environmental Programs will prepare and submit the required report to the U.S. EPA Regional Administrator, within 60 days from the time such facility becomes subject to this provision. The report shall be addressed as follows.

**United States Environmental Protection Agency  
Region 1  
5 Post Office Square  
Suite 100  
Boston, MA, 02109-3912**

Copies of the report provided to US EPA will be kept on file EHS – Environmental Programs and with the UConn Avery Point Facilities Operations office.

EPA requires the following information be detailed in the oil spill report:

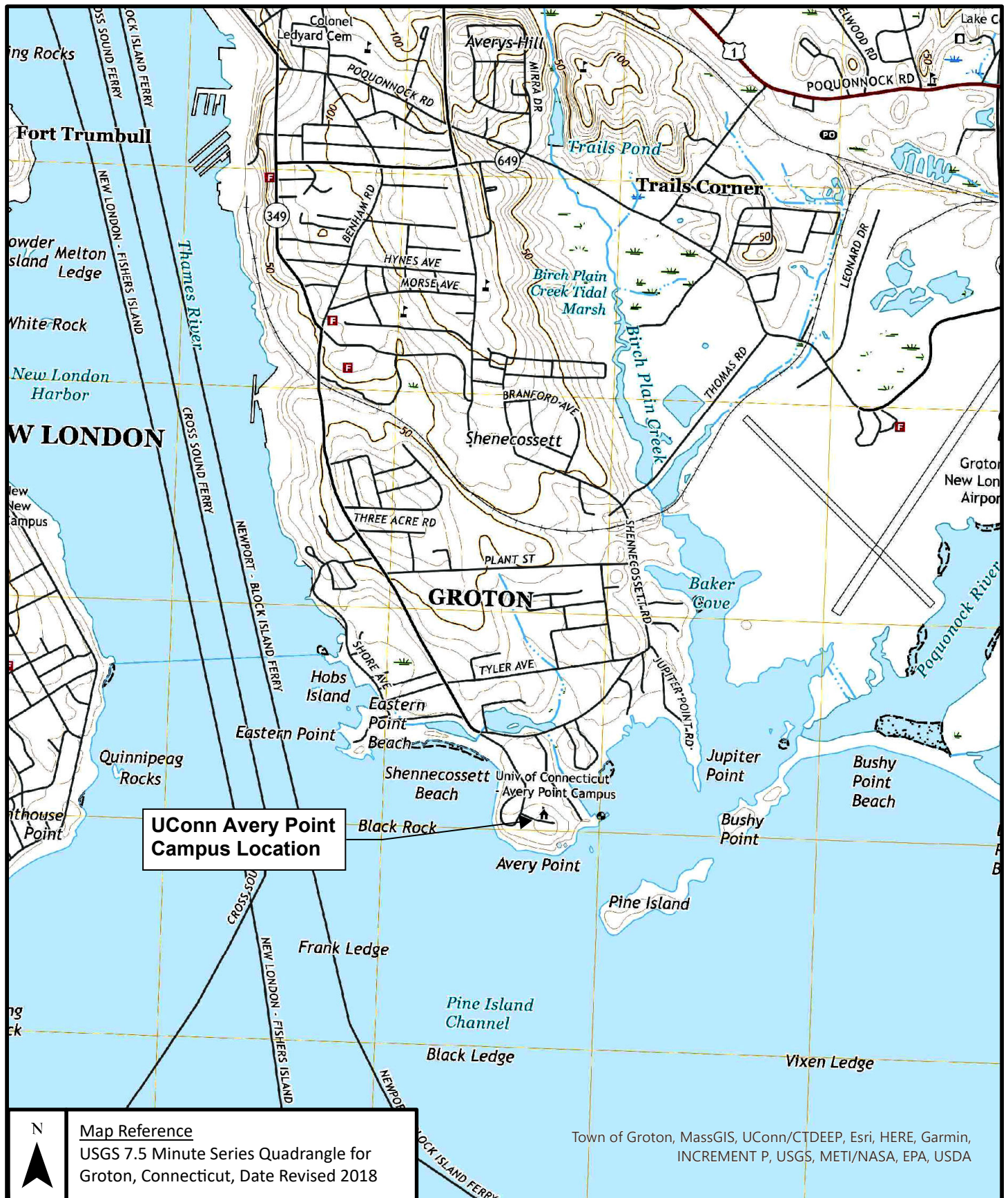
- Name and location of facility
- Name(s) of the owner or operator of the facility
- Maximum storage/handling capacity of the facility and normal daily throughput
- Description of the facility (including maps, flow diagrams, and topographical maps)
- The cause(s) of such discharge (including a failure analysis of the system or subsystem in which the failure occurred)
- Exact type and quantity of oil spilled
- The corrective actions and/or countermeasures taken (including a description of equipment repairs and/or replacements)
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence, and
- Any other information as requested the U.S. EPA Regional Administrator

A copy of the US EPA Oil Spill Report Form is included in **Appendix F**.

## FIGURES

Figure 1	Site Location Map
Figure 2	Facility Diagram



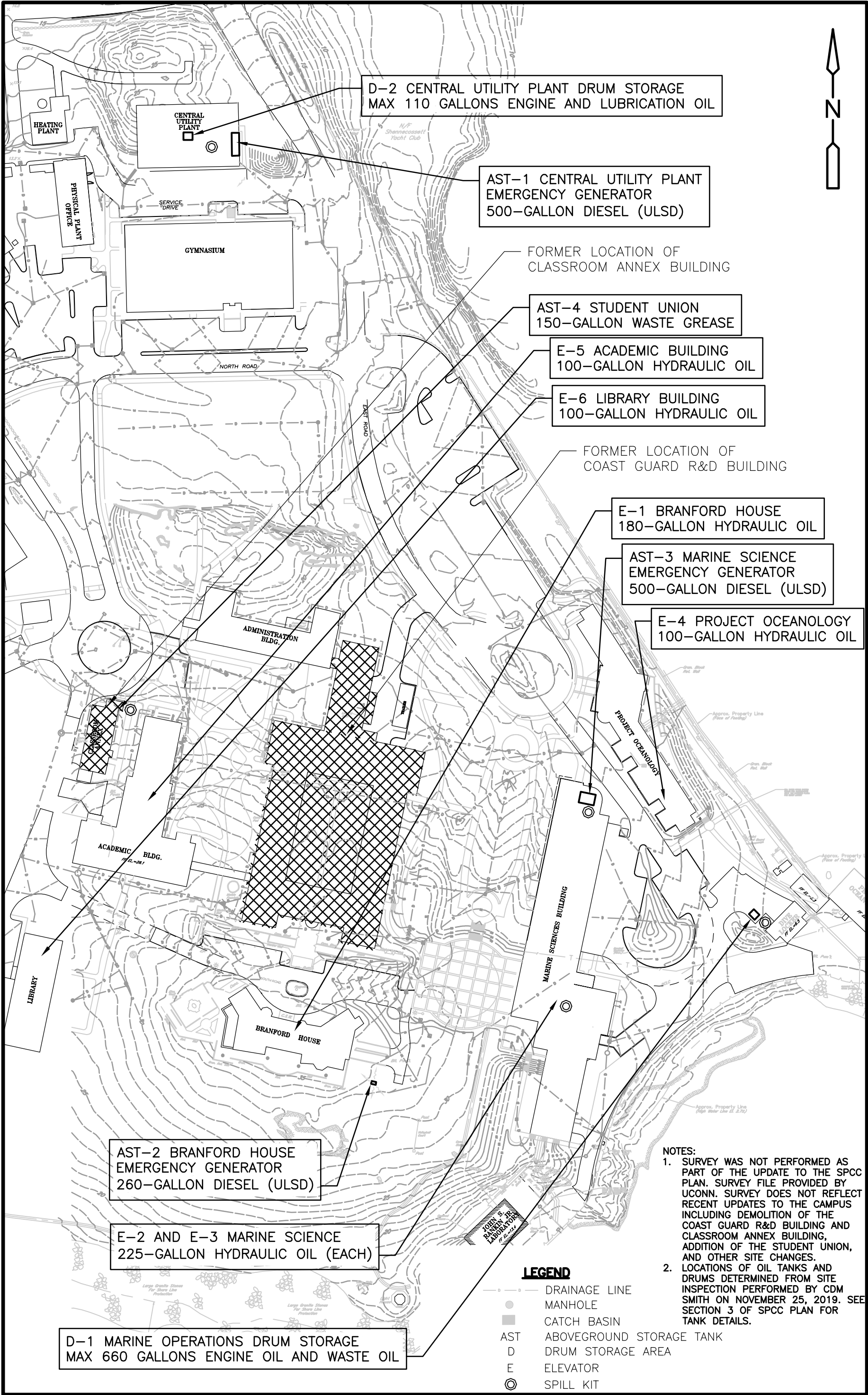


**CDM  
Smith**

1 in = 2,000 ft  
 0 1,000 2,000  
 Feet

**Figure 1 - Site Location**  
 UConn Avery Point Campus  
 Groton, CT





## **APPENDIX A**

### **MONTHLY ABOVEGROUND STORAGE TANK AND DRUM INSPECTION CHECKLISTS**

AST Monthly Inspection Checklist			
AST Information			
Tank ID:	AST-1	Date:	
Tank Location:	Central Utilities Plant Generator Room	Inspector:	
Tank Capacity/Contents:	500-gallon ULSD		
Item	Status		
1.0 Tank Containment	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
2.0 Leak Detection			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
3.0 Tank Attachments or Appurtenances			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
4.0 Tank Foundation and Supports			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
5.0 Tank/Piping External Coating			
5.1 No evidence of paint failure?			
6.0 Tank Shell/Heads			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
7.0 Tank Piping			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
8.0 Other Conditions			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID:	AST-2	Date:	
Tank Location:	Branford House - Exterior	Inspector:	
Tank Capacity/Contents:	260-gallon ULSD		
Item	Status		
1.0 Tank Containment	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
2.0 Leak Detection			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
3.0 Tank Attachments or Appurtenances			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
4.0 Tank Foundation and Supports			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			
5.0 Tank/Piping External Coating			
5.1 No evidence of paint failure?			
6.0 Tank Shell/Heads			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
7.0 Tank Piping			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
8.0 Other Conditions			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			





Drum Monthly Inspection Checklist			
Drum Information			
Drum ID:	D-1	Date:	
Drum Location:	Marine Operations	Inspector:	
Total Drum Capacity/Contents: 660-gallon Engine Oil, Waste Oil, and antifreeze			
Item	Status		
1.0 Drums	YES	NO	N/A
1.1 No leaking of one or more containers?			
1.2 No noticeable container distortions, buckling, denting, or bulging?			
1.3 No evidence of corrosion or cracking?			
1.4 All drums properly labeled?			
1.5 Drums located within lockers or on top of spill pallets providing secondary containment?			
2.0 Storage Areas			
2.1 Containers stored in proper location?			
2.2 Storage area free of excess liquid, debris, cracks, or fire hazards?			
2.3 Pathways to storage area free of obstacles and obstructions?			
3.0 Spill Response Equipment			
3.1 Spill response inventory complete?			
4.0 Other Conditions			
4.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			



Drum Monthly Inspection Checklist			
Drum Information			
Drum ID:	D-2	Date:	
Drum Location:	Central Utility Plant	Inspector:	
Total Drum Capacity/Contents: 110-gallon Engine Oil, Lubrication Oil			
Item	Status		
1.0 Drums	YES	NO	N/A
1.1 No leaking of one or more containers?			
1.2 No noticeable container distortions, buckling, denting, or bulging?			
1.3 No evidence of corrosion or cracking?			
1.4 All drums properly labeled?			
1.5 Drums located within lockers or on top of spill pallets providing secondary containment?			
2.0 Storage Areas			
2.1 Containers stored in proper location?			
2.2 Storage area free of excess liquid, debris, cracks, or fire hazards?			
2.3 Pathways to storage area free of obstacles and obstructions?			
3.0 Spill Response Equipment			
3.1 Spill response inventory complete?			
4.0 Other Conditions			
4.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID:	E-1	Date:	
Tank Location:	Branford House Elevator	Inspector:	
Tank Capacity/Contents:	180-gallon Hydraulic Oil		
Item	Status		
1.0 Tank Containment	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
2.0 Leak Detection			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
3.0 Tank Attachments or Appurtenances			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
4.0 Tank Foundation and Supports			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
5.0 Tank/Piping External Coating			
5.1 No evidence of paint failure?			
6.0 Tank Shell/Heads			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
7.0 Tank Piping			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
8.0 Other Conditions			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID: E-2		Date:	
Tank Location: Marine Science Elevator No. 1		Inspector:	
Tank Capacity/Contents: 225-gallon Hydraulic Oil			
Item	Status		
<b>1.0 Tank Containment</b>	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
<b>2.0 Leak Detection</b>			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
<b>3.0 Tank Attachments or Appurtenances</b>			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
<b>4.0 Tank Foundation and Supports</b>			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
<b>5.0 Tank/Piping External Coating</b>			
5.1 No evidence of paint failure?			
<b>6.0 Tank Shell/Heads</b>			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
<b>7.0 Tank Piping</b>			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
<b>8.0 Other Conditions</b>			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID: E-3		Date:	
Tank Location: Marine Science Elevator No. 2		Inspector:	
Tank Capacity/Contents: 225-gallon Hydraulic Oil			
Item	Status		
<b>1.0 Tank Containment</b>	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
<b>2.0 Leak Detection</b>			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
<b>3.0 Tank Attachments or Appurtenances</b>			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
<b>4.0 Tank Foundation and Supports</b>			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
<b>5.0 Tank/Piping External Coating</b>			
5.1 No evidence of paint failure?			
<b>6.0 Tank Shell/Heads</b>			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
<b>7.0 Tank Piping</b>			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
<b>8.0 Other Conditions</b>			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID: E-4		Date:	
Tank Location: Project Oceanology Building Elevator		Inspector:	
Tank Capacity/Contents: 100-gallon Hydraulic Oil			
Item	Status		
<b>1.0 Tank Containment</b>	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
<b>2.0 Leak Detection</b>			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
<b>3.0 Tank Attachments or Appurtenances</b>			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
<b>4.0 Tank Foundation and Supports</b>			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
<b>5.0 Tank/Piping External Coating</b>			
5.1 No evidence of paint failure?			
<b>6.0 Tank Shell/Heads</b>			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
<b>7.0 Tank Piping</b>			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
<b>8.0 Other Conditions</b>			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID:	E-5	Date:	
Tank Location:	Academic Building Elevator	Inspector:	
Tank Capacity/Contents:	100-gallon Hydraulic Oil		
Item	Status		
1.0 Tank Containment	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
2.0 Leak Detection			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
3.0 Tank Attachments or Appurtenances			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
4.0 Tank Foundation and Supports			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
5.0 Tank/Piping External Coating			
5.1 No evidence of paint failure?			
6.0 Tank Shell/Heads			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
7.0 Tank Piping			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
8.0 Other Conditions			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

AST Monthly Inspection Checklist			
AST Information			
Tank ID:	E-6	Date:	
Tank Location:	Library Building Elevator	Inspector:	
Tank Capacity/Contents:	100-gallon Hydraulic Oil		
Item	Status		
1.0 Tank Containment	YES	NO	N/A
1.1 No water in primary tank, secondary containment, interstice, or spill container?			
1.2 No debris or fire hazard in containment?			
1.3 Drain valves operable and in a closed position?			
1.4 Containment egress pathways clear and gates/doors operable?			
1.5 Containment Structure in satisfactory condition?			
2.0 Leak Detection			
2.1 No visible signs of leakage around the tank, piping or secondary containment?			
3.0 Tank Attachments or Appurtenances			
3.1 Ladder and platform structure secure with no sign of severe corrosion or damage?			X
3.2 Tank Liquid level gauge readable and in good condition?			
3.3 Check all tank openings are properly sealed?			
4.0 Tank Foundation and Supports			
4.1 No evidence of tank settlement or foundation washout?			
4.2 No cracking or spalling of concrete pad or ring wall?			
4.3 Tank supports in satisfactory conditions?			
4.4 Water able to drain away from tank?			X
4.5 Grounding strap secured and in good condition?			X
5.0 Tank/Piping External Coating			
5.1 No evidence of paint failure?			
6.0 Tank Shell/Heads			
6.1 No noticeable shell/head distortions, buckling, denting or bulging?			
6.2 No evidence of shell/head corrosion or cracking?			
6.3 No standing water on tank top?			
7.0 Tank Piping			
7.1 Piping and connections are tight and fully engaged, no sign of wear or corrosion?			
8.0 Other Conditions			
8.1 No other conditions that should be addressed for continued safe operation?			
Comments (if any above status is NO, explain here):			

## **APPENDIX B**

### **EXAMPLE SPCC TRAINING & LOG**

**\*Please see EHS electronic files for actual annual training and logs.**



# SPCC Plan Training Log

### UConn Regional Campus:

Training Conducted By: Environmental Health Safety

Date:

[illegible]

## **APPENDIX C**

### **UConn REGIONAL CAMPUS EMERGENCY SPILL RESPONSE PROCEDURAL FLOW DIAGRAM**

## Emergency Spill Response Procedures

### Examples

- Fuel, oil, or chemical spills onto the ground or into surface water, groundwater, storm drains, or sanitary sewers
- Leaking or reacting drums of known or unknown oils, chemicals, or hazardous wastes
- Leaking above and underground storage tanks
- Fires or explosions involving oils, PCBs, pesticides, chemicals, or hazardous wastes
- Accidents involving the transportation of oils, chemicals, or hazardous wastes



### Employee Emergency Response Procedure

1. Relocate everyone in the immediate area to a safe location.
2. Dial **911**.
3. Answer questions and follow the directions of the dispatcher.



### Fire Department Emergency Response Procedure

The highest ranking member of the Fire Department will become the Incident Commander on-site. The Incident Commander will:

1. Assess the risk from the spill and take into account the:
  - Risk of fire/explosion,
  - Potential overexposure to airborne contaminants,
  - Potential for dangerous chemical reactions,
  - Contact hazards with corrosive and/or toxic chemicals, and
  - Threat to the environment.
2. Determine whether to clean-up the spill or contact a vendor below for assistance:
 

▪ Triumvirate Environmental, Newington, CT	(800) 966-9282
▪ Clean Harbors, Bristol, CT	(800) 645-8265
▪ Environmental Services, Inc., South Windsor, CT	(860) 486-7745
3. Report any spills or uncontrolled discharges of fuel, oil, petroleum or chemical liquids; solid, liquid or gaseous products; or hazardous wastes to:
 

▪ CT Department of Energy and Environmental Protection	(860) 424-3338
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If the spill or uncontrolled discharge enters a **waterway** contact:

1. National Response Center (800) 424-8802
2. CT Department of Energy and Environmental Protection (860) 424-3338
4. Contact Environmental Health and Safety to remove and properly dispose of the waste (if necessary) at 860-486-3613 or [ehs@uconn.edu](mailto:ehs@uconn.edu).

**APPENDIX D**

**UConn REGIONAL CAMPUS SPILL CONTRACTOR LIST**

**UConn Spill Contractor List**

**Triumvirate Environmental, Inc.**

80 Fenn Road, Unit C

Newington, CT 06111

Contact: Mariana Siqueira

Phone: 508-272-2789

*\*UConn specific contract # UC-20-CP061919-1*

**DAS Contract #16PSX0197**

**Clean Harbors Environmental Services, Inc.**

51 Broderick Road

Bristol, CT 06010

Contact: David Pannuto

Phone: 860-836-4533

Email: pannutod@cleanharbors.com

**Tradebe Environmental Services, Inc.**

234 Hobart Street

Meriden, CT 06450

Contact: David Holmgreen

Phone: 219-397-3951

Email: [usa.bids@tradebe.com](mailto:usa.bids@tradebe.com)

**DAS Contract #19PSX0249**

**ACV Environmental Services, Inc.**

928 East Hazelwood Ave.

Rahway NJ 07065

Contact: Jamie McIlvaine

Phone: 732-375-9988

Email: [jmcilvaine@acvenviro.com](mailto:jmcilvaine@acvenviro.com)

**Environmental Services, Inc.**

90 Brookfield St.

South Windsor, CT 06074

Contact: Bethany Callahan

Phone: 860-528-9500

Email: [bids@e-s-i.com](mailto:bids@e-s-i.com)

**Cisco LLC**

525 Ella Grasso Blvd.

New Haven, CT 06519

Contact: Chris Dickman

Phone: 203-752-2558

Email: [cdickman@snet.net](mailto:cdickman@snet.net)

**Laydon Industries, LLC**

51 Longhini Lane

New haven, CT 06519

Contact: Kristy Laydon

Phone: 203-562-7283

Email: [kristy@laydonindustries.com](mailto:kristy@laydonindustries.com)

**Moran Environmental Recovery, LLC**

20 Commerce Rd.

Newtown, CT

Contact: Michael Barden

Phone: 203-270-0095

Email: [mbarden@moranenvironmental.com](mailto:mbarden@moranenvironmental.com)

**Manafort Brothers Incorporated**

414 New Britain Ave.

Plainville, CT 06062

Contact: Michelle Brandon

Phone: 860-793-6415

Email: [mbrandon@manafort.com](mailto:mbrandon@manafort.com)

**NRC EAST ENVIRONMENTAL SERVICES INC**

89 Commerce Circle

Durham, CT 06422

Contact: Angela Coe

Phone: 508-966-6008

Email: [acoe@nrcc.com](mailto:acoe@nrcc.com)

## **APPENDIX E**

### **UConn SPILL HISTORY LOG**

## SPILL HISTORY

### UConn Regional Campus

[illegible]

## **APPENDIX F**

### **DISCHARGE NOTIFICATION FORMS**





**STATE OF CONNECTICUT  
DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION**

79 Elm Street  
Hartford, CT 06106-5127  
<http://dep.state.ct.us>

Bureau of Waste Management  
Oil and Chemical Spill Response Division

**REPORT OF PETROLEUM OR CHEMICAL PRODUCT DISCHARGE, SPILLAGE OR RELEASE**

1. When did the incident occur? Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_:\_\_\_\_  
month/day/year
2. Where did the incident occur? \_\_\_\_\_  
\_\_\_\_\_
3. How did the incident occur? (Describe the cause) \_\_\_\_\_  
\_\_\_\_\_
4. Under whose control was the chemical or petroleum product at the time of the incident?  
Name: \_\_\_\_\_  
Mailing & street address: \_\_\_\_\_  
Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_
5. Who is the owner of the property onto which the spill occurred?  
\_\_\_\_\_  
  
If this is a corporate property or property owned jointly, who is the represents the owner?  
  
Corporate property ☐ Property owned jointly ☐  
  
Name: \_\_\_\_\_  
Mailing & street address: \_\_\_\_\_  
Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_
6. When was the incident verbally reported to the Department of Environmental Protection?  
Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_:\_\_\_\_  
month/day/year





**STATE OF CONNECTICUT  
DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION**

*79 Elm Street  
Hartford, CT 06106-5127  
<http://dep.state.ct.us>*

10. What actions were taken to respond to and contain the release, spill or discharge?

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11. What actions are being taken to prevent reoccurrence of an incident of this type? (Attach additional sheets if necessary)

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12. Were there any injuries as a result of the incident? If so, list the names of exposed individuals, their addresses, phone numbers and describe their injuries. (Attach additional sheets if necessary)

Name: \_\_\_\_\_

Mailing & street address: \_\_\_\_\_

Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: \_\_\_\_\_

13. What is the appropriate advice regarding medical attention necessary for exposed individuals?

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**STATE OF CONNECTICUT  
DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION**

*79 Elm Street  
Hartford, CT 06106-5127  
<http://dep.state.ct.us>*

14. Are there any known or anticipated health risks, acute or chronic, associated with the release of this chemical or medical advice that should be communicated?

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15. Was the incident completely cleaned up by the time this report was submitted? If not, what are the anticipated remedial actions and their duration?

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16. CERTIFICATION: I hereby affirm that the foregoing statement is true to the best of my knowledge.

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Signature	Title	Date
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Print Name	Telephone
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Street Address/P.O. Box	City/Town	State & Zip
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This form may be reproduced or computerized as long as it contains all of the information requested and is on an 8½ x 11 white paper, black type format. For serious incidents the questions may be answered in narrative format which must include the preparer's affidavit.

MAIL TO:

**State of Connecticut  
Department of Energy and Environmental Protection  
Bureau of Waste Management  
Oil and Chemical Spill Response Division  
79 Elm Street  
Hartford, CT 06106-5127**

**Telephone: Routine Calls (860) 424-3024  
Emergency 24 hours (860) 424-3338**

**UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY (USEPA)  
REGION 1**

**OIL SPILL REPORT FORM**

**REPORTING ADDRESS:**

US EPA, Region 1  
1 Congress St.  
Boston, MA 02114-2023  
(888) 372-7341  
(617) 918 1111

1. Facility Name: \_\_\_\_\_
2. Facility Owner: \_\_\_\_\_
3. Facility Location: \_\_\_\_\_
4. Facility Contact Name and Address:  
\_\_\_\_\_
5. Date and Year of Initial Facility Operation: \_\_\_\_\_
6. Maximum Storage Capacity: \_\_\_\_\_
7. Normal Daily Throughput: \_\_\_\_\_
8. Description of Facility (Include topographical maps indicating direction of flow.):  
\_\_\_\_\_  
\_\_\_\_\_
9. Cause of Spill (Include failure analysis):  
\_\_\_\_\_  
\_\_\_\_\_
10. Exact Identity of Oil Spilled: \_\_\_\_\_
11. Exact Quantity Spilled: \_\_\_\_\_
12. Corrective Actions, Countermeasures, Repairs, and/ or Equipment Replacements:  
\_\_\_\_\_  
\_\_\_\_\_
13. Additional Measures Taken to Avoid Recurrence:  
\_\_\_\_\_  
\_\_\_\_\_
14. Any Additional Information Requested by the EPA:  
\_\_\_\_\_  
\_\_\_\_\_