EAST TENNESSEE STATE UNIVERSITY

Facilities Management

Policy Number: 700.33
Title: Spill Prevention, Control, and Countermeasure Policy
Implementation Date: November 28t, 2016
Audit Date: January 23, 2023
Revised Date: January 23, 2023

Introduction

The Oil Spill Regulations (40 CFR Part 112) are a part of the federal Clean Water Act. These regulations require that certain facilities prepare and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan.

ETSU has an aboveground storage capacity exceeding 1,320 gallons of oil in containers 55 gallons or larger, therefore, the university is subject to the federal regulation for Oil Pollution Prevention, 40 CFR 112.

This policy complies with the requirements of 40 CFR Part 112 of the Spill Prevention, Control, and Countermeasures (SPCC) Plan regulations.

Purpose

The purpose of this policy is to ensure the use and application of the ETSU Spill Prevention, Control, and Countermeasure Plan (attached as Appendix A) by ETSU Facilities Management employees and any contractor or their subsidiaries hired by ETSU. This Spill Prevention, Control, and Countermeasure Plan was prepared in accordance with good engineering practices and has the full approval of ETSU management. Management will use whatever personnel, equipment, and materials are deemed necessary to control and mitigate releases at ETSU. Management is fully committed to the implementation of the requirements set forth in this SPCC Plan. The priorities of response team members are based upon protection of human life, mitigating environmental harm, and protection of property, respectively.

Scope

This policy shall apply to all ETSU hired contractors, their employees, or any of their subsidiaries, and all Facilities Management employees.

Definitions

Oil: As defined by 40 CFR 112 means oil of any kind or in any form, including, but not limited to: fats, oils, 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.
Navigable Waters: Are considered by regulations to mean practically all surface bodies, streams, and wetlands.
SPCC Plan: Spill Prevention, Control and Countermeasures Plan. Purpose is to establish procedures, methods, equipment and other criteria to prevent the discharge of oil into navigable waterways.
Spill Prevention: System components and characteristics and operating procedures to prevent oil spills.
Spill Control: Control measures to prevent a spill from entering navigable waters.
Spill Countermeasures: Means to contain, cleanup and mitigate the effects of an oil spill that

could impact waterways.
Release: Any spilling, leaking, pumping, pouring, escaping, leaching or disposing into the environment.
Reportable Quantity: A spill of 25 gallons or more to the environment.

Procedures

1. The ETSU Spill Prevention, Control, and Countermeasure Plan, included as Appendix A, shall be adhered to by all ETSU hired contractors, their employees, or any of their subsidiaries, and all Facilities Management employees.
2. Any exceptions to the application of the SPCC Plan must be approved by the Director of Environmental Health & Safety and the Associate Vice President of Facilities Management.
3. The Environmental Compliance Manager will ensure that personnel involved in oil storage or container maintenance are trained annually regarding:
    a. Proper actions to be taken in the event of a spill as per 40 CFR Part 112.7(f).
    b. Familiarization of contents of the facility SPCC Plan.
    c. Review of the operation and maintenance of equipment to prevent discharges.
    d. Review of the discharge procedure protocol.
    e. Review of applicable oil pollution control regulations.
4. This amended SPCC Plan will be reviewed and evaluated at least once every 5 years by a Professional Engineer (PE) to be in accordance with Good Engineering Practices including the industry standards and requirements set forth in 40 CFR 112.
5. The SPCC Plan is required to be amended within 6 months of any material changes to the facility and the changes implemented within 6 months of the SPCC Plan amendment.
6. Any technical amendments to the SPCC Plan must be reviewed and certified by a licensed professional engineer.
7. A current copy of the SPCC Plan will be maintained at the Environmental Health & Safety Office.
8. The SPCC Plan will be maintained on the Facilities Management website, making the plan accessible to facility personnel, responders, and inspectors.

Responsibilities

All Facilities Management employees are responsible for adhering to this policy. All Facilities Management directors and supervisors will ensure that their subordinates adhere to this policy. Facilities Management employees who fail to comply with this policy may be subject to disciplinary action for noncompliance with university policies.

References

Title 40 CFR Part 112

Contact Persons

Associate Vice President of Facilities Management
Director of Environmental Health and Safety
Environmental Compliance Manager

Approved by: _____
Laura Bailey, Associate Vice President, Capital Planning and Facilities Services

Date approved: _____

Audited: July 10t, 2018
January 23, 2023

Revised: July 27t, 2018
January 23, 2023

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE 37604

Prepared for:

East Tennessee State University
1276 Gilbreath Drive
Johnson City, Tennessee 37604

December 2021

EnSafe Contract: SBC529/000-01-2017
SES No.: GS.460.000.05
PITTS No.: TB.166.005
EnSafe Project Number: 0888821830

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Nashville, Tennessee 37228
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MANAGEMENT APPROVAL

This Spill Prevention, Control, and Countermeasure (SPCC) Plan was prepared in accordance with good engineering practices and has the full approval of management. Management will use whatever personnel, equipment, and materials are deemed necessary to control and mitigate releases at East Tennessee State University. Management is fully committed to the implementation of the requirements set forth in this SPCC Plan. The priorities of response team members are based upon protection of human life, mitigating environmental harm, and protection of property, respectively. This amended SPCC Plan will be implemented as described in this Plan within 6 months and will be reviewed and evaluated at least once every 5 years.

I have reviewed the recommendations for regulatory compliance as presented in this SPCC Plan. By virtue of my office, I have authority to approve this document on behalf of the facility and to commit the necessary resources to implement the Plan to comply with existing applicable federal and state laws.

Signature	Date Signed
Printed Name	Title

RECORD OF OWNER/OPERATOR PLAN REVIEWS/AMENDMENTS

In accordance with 40 CFR 112.3 and 112.5 of the Spill Prevention, Control, and Countermeasure (SPCC) Plan regulations, there are two situations that require an amendment to the East Tennessee State University (ETSU) SPCC Plan.

Situation A

ETSU must review and amend the SPCC Plan when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge of oil into or upon the navigable waters of the United States or adjoining shore lines . . . or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

Examples of changes that may require amendment of the SPCC Plan include, but are not limited to, any of the following:

- Commissioning or decommissioning containers
- Replacing, reconstructing, or moving containers
- Replacing, reconstructing, or installing piping systems
- Construction or demolition that might alter secondary containment structures
- Changes of product or service
- Revising standard operation or maintenance procedures at a facility

An amendment made under this situation must be prepared within 6 months of the facility change and implemented as soon as possible, but not later than 6 months following preparation of the amendment.

Situation B

ETSU must complete a review and evaluation of the SPCC Plan at least once every 5 years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within 6 months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in §112.1(b) from the facility. You must document your completion of the review and evaluation, and you must sign a statement as to whether you will amend the SPCC Plan, either at the beginning or end of the SPCC Plan, or in a log or an appendix to the SPCC Plan. The following words will suffice:

I have completed review and evaluation of the SPCC Plan for East Tennessee State University on (date) and will (will not) amend the SPCC Plan as a result.

A Tennessee-licensed, professional engineer must review and certify any technical amendments to this SPCC Plan for it to effectively satisfy the SPCC rules.

An amendment made under this situation must be implemented as soon as possible, but not later than 6 months following preparation of the amendment.

Tables for Record of Review and Amendment

To facilitate SPCC Plan reviews and amendments, the following two tables are provided.

OWNER/OPERATOR RECORD OF FIVE-YEAR REVIEWS

I have completed review and evaluation of the SPCC Plan for ETSU on the date indicated below and will (will not) amend the Plan as a result.

Signature of Reviewer	Date of Review	Will Amend the Plan	Will Not Amend the Plan
	December 2026		

OWNER/OPERATOR RECORD OF SPCC PLAN AMENDMENTS

If applicable, briefly describe the type of amendment (i.e., administrative or technical). State how the amendment was completed (e.g., page change, addendum). Provide the date of the amendment and the printed name/position of person responsible for the amendment.

Description of Change (Administrative or Technical)	Date Entered	Posted By
Initial Plan	February 2009	QE2
Technical Change — Plan Update	March 2010	QE2
Technical Change — Plan Update	January 2010	QE2
Technical Change — Plan Update	September 2011	QE2
Technical Change — Plan Update	August 2016	EnSafe Inc.
Technical and Administrative Update	June 2018	EnSafe Inc.
Technical and Administrative Update	December 2019	EnSafe Inc.
Technical Change — 5-Year Review and Plan Update	December 2021	EnSafe Inc.

PROFESSIONAL ENGINEER'S CERTIFICATION

In accordance with Title 40 CFR 112.3(a), I hereby certify that I have or my agent has visited and examined the facility in accordance with 40 CFR 112.3(d), and being familiar with the provisions of 40 CFR 112, United States Environmental Protection Agency Regulations on Oil Pollution Prevention, attest that the Spill Prevention, Control, and Countermeasure (SPCC) Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part; that procedures for required inspections and testing have been established; and that the SPCC Plan is adequate for the facility.

This certification in no way may be construed as a warranty by the Licensed Professional Engineer that the adequate SPCC Plan will be fully implemented, and in no way relieves the owner or operator of the facility of its duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112.

This SPCC Plan supersedes the previous SPCC Plan dated December 2019.

M. Troy Estes — 12/10/2021

Signature — Date

M. Troy Estes, PE
State of Tennessee, PE No. 105278
Expiration Date: 8/31/2022

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

FACILITY NAME: East Tennessee State University
FACILITY ADDRESS: 1276 Gilbreath Drive
Johnson City, Tennessee 37604

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__X__

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 enough to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?
   YES_____ NO__X__

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate U.S. Environmental Protection Agency formula or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?
   YES_____ NO__X__

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate U.S. Environmental Protection Agency formula or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking-water intake[2]?
   YES_____ NO__X__

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

Certification

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

Signature _____ **Date Signed** _____

Name _____ **Title** _____

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

EXECUTIVE SUMMARY

This Spill Prevention, Control, and Countermeasure (SPCC) Plan for East Tennessee State University in Johnson City, Tennessee, was developed per 40 CFR 112. This SPCC Plan amends and supersedes the previous SPCC Plan dated December 2019.

There is one regulatory deficiency identified below:

112.8(c)(6) — The 20,000-gallon diesel aboveground storage tank (AST) at the Main Campus power plant is classified as a Category 1 system greater than 5,000 gallons. The Steel Tank Institute (STI) requires a formal external inspection by an STI-certified inspector every 20 years; the inspection was due in 2018 and still needs to be conducted.

The following Best Engineering Practice is also recommended for East Tennessee State University:

The two, 500-gallon ASTs at the Eastman Valleybrook Campus are currently empty. If there are no plans to return these two tanks to service, ETSU should consider permanently closing the tanks in accordance with 40 CFR 112.2. As long as these two ASTs are maintained in their current state, they are still regulated by the requirements of this SPCC Plan, even if they are empty.

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1.0 INTRODUCTION

112.1(b) Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a non-transportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act) that has oil in: (1) Any aboveground container;
(2) Any completely buried tank as defined in § 112.2; (3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise "permanently closed" as defined in § 112.2; (4) Any "bunkered tank" or "partially buried tank" as defined in § 112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part.

Non-transportation-related facilities refer to all fixed facilities, including support equipment, but excluding certain pipelines, railroad tank cars en route, transport trucks en route, and equipment associated with the transfer of bulk oil to or from water transportation vessels. The term also includes mobile or portable facilities, such as drilling or workover rigs, production facilities, and portable fueling facilities while in a fixed, operating mode.

A facility is regulated under 40 CFR 112 if the completely buried oil storage capacity is over 42,000 gallons or the aggregate aboveground oil storage capacity is over 1,320 gallons. The aboveground storage capacity is based on containers with a capacity of 55 gallons or greater.

Since East Tennessee State University (ETSU) in Johnson City, Tennessee, has an aboveground storage capacity exceeding 1,320 gallons of oil in containers 55 gallons or larger, the facility is subject to the federal regulation for Oil Pollution Prevention, Code of Federal Regulations, Title 40, Part 112 (40 CFR 112). The regulation requires Spill Prevention, Control, and Countermeasure (SPCC) Plans to be implemented by facilities with oil storage units or facilities that store or transfer oil. The purpose of the SPCC Plan is to establish procedures, methods, equipment, and other criteria to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon navigable waters of the United States or adjoining shorelines. The facility stores petroleum products onsite that could potentially discharge to Brush Creek and Sinking Creek. The ETSU facility does not qualify for the exemptions listed in 40 CFR 112.1(d).

1.1 Plan Update and Amendment

This SPCC Plan for ETSU will be reviewed by the owner or operator at least once every 5 years as outlined in the Owner/Operator Record of Five-Year Reviews (page iv). Furthermore, the SPCC Plan is required to be amended within 6 months of any material changes to the facility and the changes implemented within 6 months of the SPCC Plan amendment. Any technical amendments to the SPCC Plan must be reviewed and certified by a Tennessee-licensed, professional engineer.

1.2 Plan Purpose and Availability

The SPCC Plan will address the following:

- Spill prevention — System components and characteristics, and operating procedures to prevent oil spills.
- Spill control — Control measures to prevent a spill from entering navigable waters.
- Spill countermeasures — Countermeasures to contain, cleanup, and mitigate the effects of an oil spill that could impact navigable water.

A current copy of the SPCC Plan will be maintained at the facility. The SPCC Plan will be kept accessible to facility personnel, responders, and inspectors.

1.3 Plan Focus

This SPCC Plan is designed to address oil-containing structures at ETSU, except for any container with capacity less than 55 gallons and pole-mounted electrical transformers, which typically have capacities of 20 to 30 gallons, and therefore, are not subject to the SPCC rules. The major high-risk oil-containing structures will receive special attention to expedite and simplify the SPCC Plan development, implementation, and amendment. Low-risk oil containing structures, such as drums, are addressed as well, but not at the same level of detail as larger-capacity containers. The level of detail is intended to be commensurate with the level of risk (i.e., potential for oil release and subsequent harm/damage to navigable waterways).

As discussed in the preamble of the final SPCC rule published July 17, 2002, the following types of oil-filled equipment are specifically excluded from the U.S. Environmental Protection Agency (U.S. EPA) definition of "bulk storage container":

- In-use electrical equipment (e.g., transformers, circuit breakers, and capacitors).
- Operating equipment (e.g., lawn mowers, snow blowers, elevator lifts, motive items).
- Manufacturing equipment (e.g., hydraulic presses, hydraulic reservoirs, and enclosed lubricating systems).

- The lubricating oil compartments on generators are considered oil-filled operational equipment (OFOE); however, the fuel tanks are considered bulk storage containers and require secondary containment.

In the final rule, U.S. EPA clearly differentiated between the bulk storage of oil and the operational use of oil. Facilities with equipment containing "operational use" oil are not required to comply with the strict provisions of 40 CFR 112.8(c), such as secondary containment, testing and inspection, and oil level gauges. The intent of 40 CFR 112.8(c) is to ensure oil spill prevention provisions are effectively in place for facilities that practice the bulk storage of oil.

However, OFOE must meet other SPCC requirements, such as the general oil spill prevention requirements as described in 40 CFR 112.7(c) — to provide appropriate containment and/or diversionary structures (e.g., dikes, curbing, culverts, weirs/barriers, retention ponds, drainage systems, or sorbent material) to prevent discharged oil from reaching a navigable watercourse or affecting certain natural resources. The operator must also have an inspection or monitoring program for the equipment to detect a failure and/or discharge. An individual impracticability determination for this equipment is not required.

1.4 Oil-Water Separators/Grease Traps

Section 112.1(d)(6) exempts oil-water separators used exclusively for wastewater treatment that are flow-through separators and are not engaged in a static process in an isolated container. A grease trap that intercepts and congeals oil and grease from liquid waste is considered wastewater treatment and exempt from SPCC rules. However, a separate container storing oil removed from an exempt separator is considered a bulk storage container and is subject to the SPCC rule requirements.

1.5 Plan Organization and Regulatory References

In general, this SPCC Plan follows the sequence of the regulatory requirements outlined in 40 CFR 112.7 and 112.8 and discusses the facility's conformance to those applicable regulatory requirements. For sections with regulatory references, the federal SPCC regulatory requirements are summarized in Table 1-1.

Table 1-1	**Regulatory Requirement and Text Cross-Reference Matrix**	
Topic	**CFR Citation**	**Spill Prevention, Control, and Countermeasure Plan Page or Section**
Requirement for an SPCC Plan	40 CFR 112.1	1.0 and pages ii-iii
Professional Engineer Certification	40 CFR 112.3(d)	page v
Plan Available Onsite	40 CFR 112.3(e)	1.2
Reportable Discharges	40 CFR 112.4(a)	17.0
Changes Required by Regional Administrator Implemented	40 CFR 112.4(d),(e)	18.1
Plan Amendment — Change Affecting Potential for Discharge	40 CFR 112.5(a)	1.1
Plan Amendment — 5-Year Plan Review and Amendment	40 CFR 112.5(b)	1.1 and page iv
Professional Engineer Certification of Technical Amendments	40 CFR 112.5(c)	1.1 and page v
Summary of Deficiencies from Rule Requirements	40 CFR 112.7(a)(2)	Executive Summary
Facility Diagram	40 CFR 112.7(a)(3)	3.1, Appendix A
Oil Storage	40 CFR 112.7(a)(3)(i)	3.2, Table 3-1
Discharge Prevention and Routine Handling	40 CFR 112.7(a)(3)(ii)	3.2, 10.0, and 16.0
Discharge or Drainage Controls	40 CFR 112.7(a)(3)(iii)	3.2, 14.0, and Table 3-1
Countermeasures for Discharge Discovery, Response, and Cleanup	40 CFR 112.7(a)(3)(iv)	5.0 and 17.0
Methods of Disposal of Recovered Materials	40 CFR 112.7(a)(3)(v)	17.0
Contact List and Telephone Numbers	40 CFR 112.7(a)(3)(vi)	17.0
Discharge Reporting Procedures	40 CFR 112.7(a)(4)	2.2, 17.2
Discharge Emergency Response Procedures	40 CFR 112.7(a)(5)	17.0
Potential Spill Predictions, Volumes, Rates, and Control	40 CFR 112.7(b)	4.0
Drainage Prevention Diversionary Structures and Containment	40 CFR 112.7(c)	5.0
Impracticality of Secondary Containment	40 CFR 112.7(d)	6.0
Inspection/Record Keeping	40 CFR 112.7(e)	7.0
Personnel Training and Spill Prevention Procedures	40 CFR 112.7(f)(1-3)	8.0
Personnel Instructions	40 CFR 112.7(f)(1)	8.1
Designated Person Accountable for Spill Prevention	40 CFR 112.7(f)(2)	8.2
Spill Prevention Briefings	40 CFR 112.7(f)(3)	8.3
Site Security	40 CFR 112.7(g)	9.0
Loading/Unloading Operations	40 CFR 112.7(h)(1-3)	10.0
Adequate Secondary Containment for Loading/Unloading Racks	40 CFR 112.7(h)(1)	10.1
Warning or Barrier System for Vehicles	40 CFR 112.7(h)(2)	10.2
Vehicles Examined for Lowermost Drainage Outlets before Leaving	40 CFR 112.7(h)(3)	10.3
Brittle Fracture or Other Catastrophe of Field-Constructed Tanks	40 CFR 112.7(i)	11.0
Conformance with Other Applicable Requirements	40 CFR 112.7(j)	12.0
Oil-Filled Operational Equipment	40 CFR 112.7(k)	13.0
Drainage Control	40 CFR 112.8(b)(1-5)	14.0
Drainage from Diked Storage Areas	40 CFR 112.8(b)(1)	14.1
Valves Used on Diked Storage Areas	40 CFR 112.8(b)(2)	14.2
Plant Drainage Systems from Undiked Areas	40 CFR 112.8(b)(3)	14.3
Final Discharge of Drainage	40 CFR 112.8(b)(4)	14.4
Facility Drainage Systems and Equipment	40 CFR 112.8(b)(5)	14.5
Bulk Storage Tanks/Secondary Containment	40 CFR 112.8(c)(1-11)	15.0
Container Compatibility with Its Contents	40 CFR 112.8(c)(1)	15.1
Diked Area Construction and Containment Volume for Storage Containers	40 CFR 112.8(c)(2)	15.2

Diked Area, Inspection, and Drainage of Rainwater	40 CFR 112.8(c)(3)	15.3
Corrosion Protection of Buried Metallic Storage Tanks	40 CFR 112.8(c)(4)	15.4
Corrosion Protection of Partially Buried Metallic Tanks	40 CFR 112.8(c)(5)	15.5

Table 1-1
Regulatory Requirement and Text Cross-Reference Matrix

Topic	CFR Citation	Spill Prevention, Control, and Countermeasure Plan Page or Section
Aboveground Tank Periodic Integrity Assessment	40 CFR 112.8(c)(6)	15.6
Control of Leakage through Internal Heating Coils	40 CFR 112.8(c)(7)	15.7
Liquid-Level Sensing Devices	40 CFR 112.8(c)(8)	15.8
Observation of Disposal Facilities for Effluent Discharge	40 CFR 112.8(c)(9)	15.9
Visible Oil Leak Corrections from Tank Seams and Gaskets	40 CFR 112.8(c)(10)	15.10
Appropriate Position of Mobile or Portable Oil Storage Containers	40 CFR 112.8(c)(11)	15.11
Facility Transfer Operations	40 CFR 112.8(d)(1-5)	16.0
Buried Piping Installation Protection and Examination	40 CFR 112.8(d)(1)	16.1
Not-In-Service and Standby Service Terminal Connections	40 CFR 112.8(d)(2)	16.2
Pipe Supports Design	40 CFR 112.8(d)(3)	16.3
Aboveground Valve and Pipeline Examination	40 CFR 112.8(d)(4)	16.4
Aboveground Piping Protection from Vehicular Traffic	40 CFR 112.8(d)(5)	16.5

2.0 FACILITY INFORMATION

2.1 Facility Owner/Operator, Address, and Telephone:

SPCC Plan Administrator: Michael Barrett, Environmental Compliance Manager

Facility Owner: State of Tennessee

Facility Operator: East Tennessee State University

Addresses:

Main Campus
1276 Gilbreath Drive
Johnson City,
Tennessee 37604
423-439-1000

Eastman Valleybrook Campus
122 Pickens Road
Kingsport, Tennessee 37663
423-349-0214

Kingsport Campus
1501 University Blvd
Kingsport, Tennessee 37660
423-392-8000

Gray Fossil Site
1212 Suncrest Drive
Gray, Tennessee 37615
423-439-3659

Facility Contacts:

Primary: Michael Barrett, Environmental Compliance Manager
423-439-6029 (office)
423-202-1237 (24-hour contact number)

Secondary: Mark Jee, EHS Director
423-439-7785 (office)
423-741-5272 (24-hour contact number)

2.2 Facility Contact(s)

112.7(a)(3)(vi): You must also address in your plan contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate federal, state, and local agencies who must be contacted in case of a discharge as described in 112.1(b).

Primary Contacts for the SPCC Plan:

Table 2-1
Primary SPCC Plan Contacts

Name, Title/Position	Telephone Numbers	
	Primary	Emergency/Alternative
Michael Barrett, Environmental Compliance Manager	423-439-6029	423-202-1237
Mark Jee, EHS Director	423-439-7785	423-741-5272
Maintenance (24 hour)	423-439-7900	423-439-7900
Public Safety Office (24 hour)	423-439-4480	423-439-4480
EnSafe Inc., Spill/Spill Prevention, Control, and Countermeasure Plan and Tank Consultant	615-255-9300	888-590-8885
Laura Waynick, Department of General Services Environmental Compliance Manager	615-428-8101	615-428-8101

2.3 Facility Operations and Oil Storage Overview

ETSU, a part of the Tennessee Board of Regents, has a main campus located in Johnson City, Tennessee, and satellite campuses in Kingsport, Gray, and Elizabethton, Tennessee. All facilities are located in Washington County or Sullivan County. The facilities house several dormitories, a fueling center, maintenance facilities, sports stadiums, warehouses, a hospital, and a multitude of educational facilities. The main campus has a multitude of elevator reservoirs, generators, and transformers, as well as a 15,000-gallon gasoline underground storage tank (UST) for fueling and a 4,000-gallon diesel UST for fueling. ETSU's main campus operates nearly 24/7.

The James H. Quillen College of Medicine and Veterans Affairs Medical Center (College of Medicine) is located just north of State of Franklin Road and ETSU's main campus. The College of Medicine has a multitude of elevator reservoirs, generators, and transformers, as well as a 6,000-gallon UST and 4,000-gallon UST, both associated with generators. This facility operates 24/7.

The Eastman Valleybrook Campus (Valleybrook) located in Kingsport consists of 144 acres, with an office complex and warehouse. Valleybrook has two 500-gallon aboveground storage tanks (ASTs) (diesel and gasoline), an elevator reservoir, and a 150-gallon diesel generator.

ETSU and General Shale Brick Natural History Museum and Visitor Center (Gray Fossil Site) located in Gray, is a research and education facility and museum open from 10:00 a.m. to 5:00 p.m., Tuesday through Sunday. The Gray Fossil Site houses a generator, a transformer, and an elevator reservoir.

Figure 1 in Appendix A shows the location of each of the ETSU campuses. More details about oil storage containers are included in Table 3-1.

2.4 Drainage Pathway and Distance to Navigable Waters

Figures 2 through 8 in Appendix A show storm water drainage patterns at each location. All site storm water at ETSU's main campus and College of Medicine flows via aboveground and belowground storm water conveyances. Some is comingled with Johnson City storm water drainage from roadways and the surrounding businesses. All storm water on these two sites flows to Brush Creek and Sinking Creek.

Storm water from Valleybrook flows east to a miscellaneous tributary to Kendrick Creek via aboveground and belowground storm water conveyances.

Storm water from the Gray Fossil Site flows east via sheet flow to aboveground and belowground conveyances to Ford Creek.

Storm water from the Kingsport Campus Site flows northeast via sheet flow to aboveground and belowground conveyances to a miscellaneous tributary to North Fork Holston River.

3.0 PETROLEUM STORAGE INFORMATION

3.1 Facility Diagram

112.7(a)(3): Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under §112.1(d)(11).

Figures 2 through 8 in Appendix A show the locations and contents of all oil storage containers with capacities of 55 gallons or more.

3.2 Oil Storage, Prevention, and Control

112.7(a)(3)(i): You must also address in your Plan the type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities.; 112.7(a)(3)(iii): You must also address in your Plan discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge.

Table 3-1 provides detailed information on all oil storage containers identified at the facility that are subject to SPCC requirements, which includes multiple ASTs, USTs, a tote, generators, and OFOE. Information provided includes: location, container type, container capacity, substance stored, secondary containment, and flow direction/drainage basin. Specific information regarding overfill protection is also provided.

Sections 10 and 16 provide information on oil transfer operations.

3.3 Permanently Closed Tanks

ASTs that are inactive, but not permanently closed, are still subject to the requirements of 40 CFR 112, including regular inspections and adequacy of secondary containment. To avoid these requirements, a tank must be "permanently closed" in accordance with the definition per 40 CFR 112 shown as follows.

40 CFR 112.2 Definitions:	
Permanently closed means any container or facility for which:	
(1)	All liquid and sludge have been removed from each container and connecting line; and
(2)	All connecting lines and piping have been disconnected from the container and blanked off (i.e., capped or blank flanged), all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

The two, 500-gallon ASTs at the Valleybrook campus are currently empty. If there are no plans to return these two tanks to service, ETSU should consider permanently closing the tanks in accordance with 40 CFR 112.2. As long as these two ASTs are maintained in their current state, they are still regulated by the requirements of this SPCC Plan; even if they are empty.

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Aboveground Storage Tanks									
Main Campus Facilities Management 	AST	Steel/Steel	Y/Y	Visible clock gauge, emergency shut-off, audible overfill alarm, locked fill port	Diesel/ 1,000	>1,000	2008	Southwest in concrete storm water trench to curb inlet.	Double-walled
Valleybrook Campus Gas (Left) 	AST	Steel/NA	N/N	Visual observation, manual gauge	Gasoline/ 500 (EMPTY)	>550	1995	Radial to concrete containment /East to asphalt.	Located in concrete secondary containment with cover.
Valleybrook Campus Diesel (Right) 	AST	Steel/NA	N/N	Visual observation, manual gauge	Diesel/500 (EMPTY)	>550	1995	Radial to concrete containment /East to asphalt.	Located in concrete secondary containment with cover.

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Power Plant Generator 	AST	Steel/Steel	N/N	Emergency shut-off, audible overfill alarm, locked fill port, manually gauged	Diesel/ 20,000	>22,000	1998	Contained in steel secondary containment structure then southwest to catch basin.	Secondary containment structure
Main Campus Memorial Hall Generator 	AST	Steel/Steel	Y/N	Visible clock gauge, emergency shut-off, audible overfill alarm, locked fill port	Diesel/550	>550	UK	Radial to surrounding concrete/ Southeast to catch basin.	Double-walled
Main Campus Memorial Center (Mini-Dome) Generator 	AST	Steel/Steel	Y/N	Visible clock gauge, emergency shut-off, locked fill port	Diesel/298	>298	1999	Radial to surrounding concrete/ Southwest in concrete storm water trench to curb inlet.	Double-walled

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Underground Storage Tanks (Exempt)									
College of Medicine Stanton-Gerber Hall 	UST	Fiberglass/ Fiberglass	N/N	Locked fill port, automatic tank gauging, visual observation during transfer	Diesel/ 6,000	NA	1986	Radial to surrounding ground/ Groundwater	NA
College of Medicine Emergency Generator Building 	UST	Fiberglass/ Flexible Plastic	N/N	Locked access area, automatic tank gauging, visual observation during transfer	Diesel/ 4,000	NA	1983	Radial to surrounding ground/ Groundwater	NA

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Facilities Management 	UST	Fiberglass/ Flexible Plastic	Y/N	Locked dispensing, visual observation during transfer, automatic tank gauging, emergency shut off	Gasoline/ 15,000	NA	1999	Radial to surrounding ground/ Groundwater	NA
Main Campus Facilities Management 	UST	Fiberglass/ Flexible Plastic	Y/N	Locked dispensing, visual observation during transfer, automatic tank gauging, emergency shut off	Diesel/ 4,000	NA	1999	Radial to surrounding ground/ Groundwater	NA
Tote									
Main Campus Turf Maintenance 	Tote	Polyurethane /NA	N/NA	Visual inspection, stored inside building with impervious floor	Used oil/275	>275	UK	Radial to surrounding concrete floor/stored inside.	Located indoors, concrete floor, floor drains blocked.

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Generators									
Main Campus Buccaneer Ridge Building R 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/55	>55	2011	Radial to surrounding concrete pad and grass.	Double-walled
Main Campus Buccaneer Ridge 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/400	>400	1998	Radial to surrounding concrete pad and grass.	Double-walled
Main Campus Buccaneer Ridge Building P & Q 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/80	>80	2009	Radial to surrounding concrete pad and grass.	Double-walled

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Carter Hall 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/250	>250	2007	Radial to surrounding concrete pad and mulch.	Double-walled
Main Campus Centennial Hall 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/750	>750	2008	Radial to surrounding concrete pad and gravel.	Double-walled
Main Campus Basler Center for Physical Activity 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/300	>300	2000	Radial to surrounding concrete.	Double-walled, located indoors

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Governors Hall 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/750	>750	2006	Radial to surrounding concrete pad and grass.	Double-walled
Main Campus Roy S. Nicks Hall 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/700	>700	2005	Radial to surrounding concrete pad and grass.	Double-walled
Main Campus Charles C. Sherrod Library 	Generator	Steel/Steel	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/200	>200	1997	Radial to surrounding concrete.	Double-walled, located indoors

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Lucille Clement Hall 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/785	>785	2011	Radial to surrounding concrete pad and grass.	Double-walled
Main Campus Burgin-Dossett Hall 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/298	>298	2011	Radial to surrounding gravel.	Double-walled
College of Medicine William L. Jenkins Forensics Center 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/ 1,000	>1,000	2005	Radial to surrounding concrete pad.	Double-walled

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
College of Medicine Emergency Generator Building 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/710	>710	2013	Radial to surrounding concrete.	Double-walled
College of Medicine Emergency Generator Building 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/330	>330	1982	Radial to surrounding concrete.	Double-walled, located indoors
Gray Fossil Site 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/150	>150	2006	Radial to surrounding concrete pad and grass.	Double-walled

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Valleybrook Campus 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/150	>150	1995	Radial to surrounding concrete.	Double-walled, located indoors
Main Campus Tennis Complex 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/660	>660	2017	Radial to surrounding concrete pad/and grass.	Double-walled
Main Campus Power Plant 	Generator (Day Tank)	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/100	>100	1998	Radial to surrounding concrete.	Double-walled, located indoors

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus D.P. Culp University Center 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/198	>198	2019	Radial to surrounding concrete pad and grass.	Double-walled
Main Campus Data Center 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/ 2,183	>2,183	2016	Radial to surrounding concrete/ Southwest to catch basin.	Double-walled
College of Medicine Clinical Education Building I 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/300	>300	2013	Radial to surrounding concrete/ North to catch basin.	Double-walled

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
College of Medicine Johnson City Community Health Center 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/217	>217	2012	Radial to surrounding concrete pad and grass.	Double-walled
College of Medicine Stanton-Gerber Hall 	Generator (Day Tank)	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/100	>100	1986	Radial to surrounding concrete pad and grass/ Southeast to catch basin.	Double-walled
Main Campus Millennium Center 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/200	>200	UK	Radial to surrounding concrete pad and grass.	Double-walled

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Transformers									
College of Medicine Building #119 (Photo not available)	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/180	NA	UK	Radial/ surrounding ground	None/none
College of Medicine Building #119 (Photo not available)	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/180	NA	UK	Radial/ surrounding ground	None/none
College of Medicine 5th Street @ Oak Drive (Photo not available)	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/240	NA	UK	Radial/ surrounding ground	None/none
College of Medicine 5th Street @ Maple Avenue (Photo not available)	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/259	NA	UK	Radial/ surrounding ground	None/none
College of Medicine William L Jenkins Forensics Center (Photo not available)	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/344	NA	UK	Radial/ surrounding ground	None/none
College of Medicine Stanton-Gerber Hall (Photo not available)	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/480	NA	UK	Radial/ surrounding ground	None/none
College of Medicine Clinical Education Building I (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/297	NA	UK	Radial/ surrounding ground	None/none
Main Campus Memorial Center (Mini-Dome) 49250 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/447	NA	UK	Radial/ surrounding ground	None/none
Main Campus Memorial Center (Mini-Dome) 51502 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/234	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Memorial Center (Mini-Dome) 49249 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/447	NA	UK	Radial/ surrounding ground	None/none
Main Campus Memorial Center (Mini-Dome) 42563 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/258	NA	UK	Radial/ surrounding ground	None/none
Main Campus Ernest Ball Hall 42570 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/247	NA	UK	Radial/ surrounding ground	None/none
Main Campus Burleson Hall 54964 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/319	NA	UK	Radial/ surrounding ground	None/none
Main Campus D. M. Brown Hall 42709 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/222	NA	UK	Radial/ surrounding ground	None/none
Main Campus D. M. Brown Hall 48372 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/384	NA	UK	Radial/ surrounding ground	None/none
Main Campus Alexander Hall "University School" 34500 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/146	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Burgin-Dossett Hall 43793 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/264	NA	UK	Radial/ surrounding ground	None/none
Main Campus Rogers-Stout Hall 45058 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/178	NA	UK	Radial/ surrounding ground	None/none
Main Campus Centennial Hall 47660 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/263	NA	UK	Radial/ surrounding ground	None/none
Main Campus Reece Museum 44947 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Main Campus Gilbreath Hall 45738 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/204	NA	UK	Radial/ surrounding ground	None/none
Main Campus Carter Hall 48494 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/235	NA	UK	Radial/ surrounding ground	None/none
Main Campus John Lamb Hall 42571 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/383	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus John Lamb Hall 54965 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/470	NA	UK	Radial/ surrounding ground	None/none
Main Campus Nursing 26748 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Main Campus Nursing 26749 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Main Campus Nursing 32405 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Main Campus Hutcheson Hall 42565 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/247	NA	UK	Radial/ surrounding ground	None/none
Main Campus Harry D. Powell Observatory (No Number Provided) (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Main Campus Sam Wilson Hall 42564 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/247	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Brooks Gym 42567 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/256	NA	UK	Radial/ surrounding ground	None/none
Main Campus Power Plant 54966 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/348	NA	UK	Radial/ surrounding ground	None/none
Main Campus Clack Building 54982 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/664	NA	UK	Radial/ surrounding ground	None/none
Main Campus Clack Building 54983 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/664	NA	UK	Radial/ surrounding ground	None/none
Main Campus Clack Building 49021 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/593	NA	UK	Radial/ surrounding ground	None/none
Main Campus Clack Building 49022 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/593	NA	UK	Radial/ surrounding ground	None/none
Main Campus Clack Building 49023 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/415	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Warf Pickel Hall 42569 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/249	NA	UK	Radial/ surrounding ground	None/none
Main Campus Warf Pickel Hall 42568 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/258	NA	UK	Radial/ surrounding ground	None/none
Main Campus Wilson Wallis Hall 44052 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/153	NA	UK	Radial/ surrounding ground	None/none
Main Campus Sherrod Library 50635 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/304	NA	UK	Radial/ surrounding ground	None/none
Main Campus Sherrod Library 54984 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/529	NA	UK	Radial/ surrounding ground	None/none
Main Campus Old Sherrod Library 42566 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/222	NA	UK	Radial/ surrounding ground	None/none
Main Campus D. P. Culp Center 48398 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/594	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Governors Hall 46091 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/260	NA	UK	Radial/ surrounding ground	None/none
Main Campus Davis Apartments 21080 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Main Campus Davis Apartments 24285 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Main Campus Davis Apartments 26750 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Main Campus Soccer Field 44057 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/215	NA	UK	Radial/ surrounding ground	None/none
Main Campus Soccer Field 47956 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/215	NA	UK	Radial/ surrounding ground	None/none
Main Campus Betty Basler Field – Softball Stadium 47680 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/215	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Basler Center for Physical Activity 54985 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/181	NA	UK	Radial/ surrounding ground	None/none
Main Campus Physical Plant 150/JC_201 (Photo not available)	Transformer/ Junction Cube	Steel/NA	NA/NA	Visual observation	Mineral Oil/220	NA	UK	Radial/ surrounding ground	None/none
Main Campus Luntsford Apartments 45584 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Main Campus Nell Jennings Dossett Hall 46096 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Main Campus Ross Hall Panhallenic 46087 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Main Campus Powell Hall 46089 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Main Campus Lucille Clement Hall 46187 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/214	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Lucille Clement Hall 44809 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/203	NA	UK	Radial/ surrounding ground	None/none
Main Campus Lucille Clement Hall 45825 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/147	NA	UK	Radial/ surrounding ground	None/none
Main Campus WETS Radio 42430 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/102	NA	UK	Radial/ surrounding ground	None/none
Main Campus WETS Radio 48641 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/368	NA	UK	Radial/ surrounding ground	None/none
Main Campus Centennial Drive 49248 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/393	NA	UK	Radial/ surrounding ground	None/none
Main Campus Central Receiving Plant 36182 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/125	NA	UK	Radial/ surrounding ground	None/none
Main Campus Central Receiving Plant 45390 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/117	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Buccaneer Ridge Apts. 34646 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/67	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. 34645 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/67	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. 36491 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/104	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. 36495 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/104	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. 35591 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/87	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. 36344 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/104	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. 42427 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/71	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Buccaneer Ridge Apts. 42429 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/71	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. Apartments T-U 37785 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. Apartments T-U 37936 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
Main Campus Buccaneer Ridge Apts. Apartments T-U 37932 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
Main Campus Thomas Stadium 50422 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/202	NA	UK	Radial/ surrounding ground	None/none
Gray Fossil Site (Photo not available)	Transformer	Steel/NA	NA/NA	Visual Observation	Mineral Oil/331	NA	UK	Radial/ surrounding ground	None/none
Main Campus Millennium Center 1500 (Photo not available)	Transformer	Steel/NA	NA/NA	Visual Observation	Mineral Oil/200	NA	UK	Radial/ surrounding ground	None/none

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Equipment Reservoirs/Pits/Equipment									
College of Medicine Building Medical School Library (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Building #119 West Elevator (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Building #119 East Elevator (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Stanton-Gerber Hall #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Stanton-Gerber Hall #2 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Stanton-Gerber Hall Service (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Ed Allan Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
College of Medicine William L. Jenkins Forensics Center (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
College of Medicine Pharmacy School (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Brown Hall - South (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Brown Hall - North (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus D.P. Culp University Center Passenger (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus D.P. Culp University Center Service (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Basler Center for Physical Activity (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Roy S. Nicks Hall #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Roy S. Nicks Hall #2 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Gilbreath Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Rogers-Stout Hall, West (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Rogers-Stout Hall, East (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Hutcheson Hall Passenger (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Sam Wilson Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Ernest C. Ball Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors

Table 3-1
Facility Oil Storage Inventory

Location Description	Container Type	Container/ Pipe Material	Double - Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Burleson Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Governors Hall #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Main Campus Governors Hall #2 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Gray Fossil Site (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors
Eastman Valleybrook Campus (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/110	>110	UK	Contained in building	Located indoors
ETSU at Kingsport (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	UK	Contained in building	Located indoors

Notes:
AST = Aboveground storage tank
UST = Underground storage tank
gal = Gallons
N = No
NA = Not applicable
UK = Unknown
Y = Yes

Transformers belonging to Johnson City Power Board (JCPB) are listed for spill response purposes only. Gallons are approximated by size. In the event of maintenance or spills, contact JCPB at 423-282-5272. ETSU personnel are only asked to assist in limiting access and protecting the nearest catch basin in the event of a release from a JCBP transformer.

4.0 POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

112.7(b): Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

Table 3-1 lists the oil storage structures and the maximum volume (i.e., total container capacity) that could be released if a failure occurred. The worst-case spill rate is assumed to be an instantaneous release of the entire structure (i.e., rupture for bulk ASTs, rapid leakage for drums and totes, and leakage or explosion for transformers).

Additionally, Table 3-1 establishes a direction of flow from the storage structures, should the secondary containment device (if present) hypothetically fail or be insufficient to handle the release.

Section 15 describes secondary containment considerations.

Figure 2 in Appendix A shows the overall facility layout and potential spill flow pathways.

5.0 DRAINAGE PREVENTION DIVERSIONARY STRUCTURES AND CONTAINMENT

112.7(c): Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:
- (i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- (ii) Curbing or drip pans;
- (iii) Sumps and collection systems;
- (iv) Culverting, gutters, or other drainage systems;
- (v) Weirs, booms, or other barriers;
- (vi) Spill diversion ponds;
- (vii) Retention ponds; or
- (viii) Sorbent materials.

Except for areas noted in Section 15.2, all areas in which oil is stored are equipped with appropriate containment and/or diversionary structures to prevent discharged oil from reaching a navigable watercourse. Table 3-1 lists the secondary containment/diversion structure for each SPCC Rules-regulated container/oil storage area at the facility.

In addition to dikes, drainage systems, or spill diversion structures, each oil loading/unloading area and oil storage structure will be within acceptable range of ETSU spill response equipment/personnel should a release occur. ETSU spill response training, procedures, equipment, and notification procedures are detailed in Sections 8 and 17.

ETSU will rely on its inspection and maintenance program, as well as spill response activities, for managing its transformers and any small diameter piping or hoses.

Consideration of Industry Standards

As a reference, the industry standards for "Impounding Around Tanks by Open Diking" and "Secondary Containment Tanks" are outlined in this section. These standards are generally incorporated into this SPCC Plan.

Industry Standard Consideration

Impounding Around Tanks by Open Diking (National Fire Protection Association [NFPA] 30-2021, Section 22.11 .2)

(1) A slope of not less than 1 percent away from the tank shall be provided for at least 50 feet or to the dike base, whichever is less.
(2) The volumetric capacity of the diked area shall not be less than the greatest amount of liquid that can be released from the largest tank within the diked area, assuming a full tank.
(3) The outside base of the dike at ground level shall be no closer than 10 feet to any property line that is or can be built upon.
(4) Walls of the diked area shall be of earth, steel, concrete, or solid masonry designed to be liquid-tight and to withstand a full hydrostatic head.
(5) Where the average interior height of the walls of the diked area exceeds 6 feet, provisions shall be made for normal access; necessary emergency access to tanks, valves, and other equipment; and egress from the diked enclosure.
(6) Each diked area containing two or more tanks shall be subdivided, preferably by drainage channels or at least by intermediate dikes to prevent spills from endangering adjacent tanks within the diked area.
(7) Draining water from diked areas shall be controlled to prevent liquids from entering natural water resources, public sewers, or public drains.
(8) Storage of combustible materials, empty drums, full drums, or barrels shall not be permitted within the diked area.

Industry Standard Consideration

Secondary Containment Tanks (NFPA 30-2021, Section 22.11 .4)

(1) Tank capacity should not exceed 50,000 gallons.
(2) Piping connections to the tank shall be made above the maximum liquid level.
(3) Means shall be provided to prevent the release of liquid from the tank by siphon flow.
(4) Means shall be provided for determining the liquid level of tank. Means shall be accessible to the delivery operator.
(5) Means shall be provided to prevent overfilling by sounding an alarm when the liquid level in tank reaches 90% capacity and automatically stopping delivery in the tank when liquid level reaches 95% capacity.
(6) Spacing between adjacent tanks shall not be less than 3 feet.
(7) Tank shall be capable of resisting the damage from the impact of a motor vehicle or collision barriers shall be provided.
(8) Where secondary containment is enclosed, it shall have appropriate emergency venting in accordance with Section 22.7.
(9) Secondary containment shall be designed to withstand the hydrostatic head resulting from a leak from the primary tank of the maximum amount of liquid that can be stored in the primary tank.
(10) Means shall be provided to establish the integrity of the secondary containment in accordance with Chapter 21 of NFPA 30-2021.

6.0 IMPRACTICALITY OF SECONDARY CONTAINMENT, 40 CFR 112.7(D)

112.7(d): If you determine that the installation of any of the structures or pieces of equipment listed in 40 CFR 112.7 (c) and (h)(1), and 112.8(c)(2), 112.8(c)(11), to prevent a discharge as described in 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under 112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of 40 CFR 109.
(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

All areas of the facility where oil is handled or stored, except the cited deficiencies noted in other sections of this SPCC Plan, are equipped with appropriate containment and/or diversionary structures or equipment to prevent discharged oil from reaching navigable water, as required by 40 CFR 112.7(c). As detailed in Section 1.3, it is not required that facilities demonstrate impracticality for containment of spills from OFOE, including transformers. Instead, the facility must be able to respond to a release of oil from this equipment with spill response equipment and have an adequate operation, maintenance, and inspection program in place to prevent releases. Spill response and absorbent materials will be used as the primary means of containment in these cases.

7.0 INSPECTION/RECORD KEEPING

112.7(e): Conduct inspections and tests required by 40 CFR 112 in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

Although inspections may be performed more often, periodic inspections must be performed on all oil storage containers at the minimum frequencies indicated in Tables 7-1 and 7-2 to comply with industry standards. The Environmental Compliance Manager or designee is responsible for conducting the inspections and completing and signing the appropriate forms. Section 15.6 provides further details regarding integrity assessments of the containers, which will be conducted according to industry standards for the facility's containers. Example inspection forms are in Appendix B to assist ETSU with the inspection requirements. Records of required inspections must be retained for at least 3 years at the facility.

Table 7-1
Routine[1] Inspection Schedule

Type of Inspection	Required Frequency	Responsible Person	Example Inspection Form[2]	Record Retention
Shop-Fabricated Aboveground Storage Tanks[3]				
External Visual (Routine)	Monthly and annually Per STI SP001-06	Environmental Compliance Manager or Designee	Appendix B	3 years
Aboveground Piping				
External Visual (Routine)	Monthly and annually	Environmental Compliance Manager or Designee	Appendix B	3 years
Portable/Mobile Containers (e.g., Drums, Totes)				
External Visual (Routine)	Monthly Per STI SP001-06	Environmental Compliance Manager or Designee	Appendix B	3 years
Oil-Filled Operational Equipment (Including Transformers)				
External Visual (Routine)	Annually	Environmental Compliance Manager or Designee	Appendix B	3 years
Spill Kits				
Check inventory to ensure adequate supply	Monthly	Environmental Compliance Manager or Designee	Appendix B	NA

Notes:

1 Routine inspections can be performed by qualified ETSU/contractor personnel.

2 Facility-generated forms can be used in lieu of several of the example inspection forms listed above as long as they are complete.

3 Shop-fabricated tanks are not built to the American Petroleum Institute 653 industry standards and fall under the Steel Tank Institute Standard for the Inspection of Aboveground Storage Tanks (SP001-06) inspection requirements. Shop-fabricated tanks that are considered consumptive-use tanks (i.e., end-point tanks typically).

NA = Not applicable
SP001-06 = Standard for the Inspection of Aboveground Storage Tanks, Sixth Edition
STI = Steel Tank Institute

Table 7-2
Non-Routine[1] Inspection and Integrity Testing Schedule

Type of Inspection	Required Frequency	Responsible Person	Report	Record Retention
Steel Shop-Fabricated Tanks Over 5,000 gallons[2,3]				
Formal External Inspection including shell thickness measurements (tanks 5,001 to 50,000 gallons only)	Every 20 years IAW STI SP001-06 (result of the inspection may result in repairs needed based on the suitability for continued service evaluation per Section 10); All repairs should be in compliance with SP031	Certified STI Inspector	Certified documentation	Indefinite (or 5 years after lifetime of equipment)
Follow-up External Inspection (for tanks repaired as a result of the 20-year formal external inspection)	Every 5 years IAW STI SP001-06, Section 10.2.4	Certified STI Inspector	Certified documentation	Indefinite (or 5 years after lifetime of equipment)
Repair or remove from service following tank damage or leak IAW STI SP001-05, Section 10.4; All repairs should be in compliance with SP031	Immediately	(Environmental Compliance Manager) or designee	Certified documentation	Indefinite (or 5 years after lifetime of equipment)
Steel Shop-Fabricated Containers, 5,000 gallons or less, ASTs, and Portable/Mobile Containers				
Integrity Testing (Non-Routine)	None, as long as monthly and annual inspections performed and documented as required by STI SP001-06	NA	NA	NA

Notes:

1 Non-routine inspections are performed by qualified/certified personnel in accordance with regulatory requirements and/or industry accepted standards.
2 Required by industry standards, which the SPCC regulations require the engineer to consider.
3 Steel and fiberglass shop-fabricated tanks are not built to the field-constructed tank industry standards and fall under STI SP001-06 (steel) inspection requirements.

ASTs = Aboveground storage tanks
NA = Not applicable
SP001-06 = Standard for the Inspection of Aboveground Storage Tanks, 6th Edition
STI = Steel Tank Institute
SPCC = Spill Prevention, Control, and Countermeasure
FTPI = Fiberglass Tank and Pipe Institute
SP031 = Standard for Repair of Shop Fabricated Aboveground Tanks, 5th Edition

Except for the 20,000-gallon diesel tank, ASTs, drums, and mobile/portable oil storage containers are classified as Category 1 systems with capacities less than or equal to 5,000 gallons. In accordance with Table 5.4 of Steel Tank Institute (STI) Standard for the Inspection of ASTs (SP001-06), periodic (monthly and annual) visual inspections by authorized ETSU personnel are the only type of integrity testing required for Category 1 systems. No periodic inspections by an STI inspector are required for these containers unless the monthly and annual inspections are not adequately documented.

The 20,000-gallon diesel AST at the Main Campus power plant is also classified as a Category 1 system. STI requires periodic (monthly and annually) visual inspections by authorized ETSU personnel and a formal external inspection by an STI-certified inspector every 20 years. For the 20,000-gallon diesel AST, this inspection was due in 2018 and still needs to be conducted. Formal inspections are required to be documented and records maintained for the life of the tank.

7.1 Routine Visual Inspections

Table 7-1 addresses required routine visual inspections. The inspections listed in this table can be performed by qualified ETSU personnel or contractors. The Environmental Compliance Manager or designee is required to regularly inspect all containers. These inspections should include observing oil tanks, tote storage/staging areas, loading/unloading, and transfer areas to identify evidence of leaks, spills, and signs of compromised integrity (e.g., plastic or metal fatigue, rusting, bulging). All records must be kept on file for at least 3 years. If a deficiency is noted, it must be either described on the appropriate line or at the bottom of the inspection form reserved for remarks. Corrective action must then be taken to repair or replace a deficient container.

7.2 Non-Routine Inspections and Integrity Testing

Generally, Table 7-2 addresses minimum required integrity testing and non-routine inspections that must be performed by qualified inspectors (e.g., authorized American Petroleum Institute [API]- or STI-certified inspector). The integrity testing and inspections listed in this table must be performed in accordance with acceptable industry standards and/or regulatory requirements.

7.3 Inspection Authority Proof

Each routine inspection form is signed and dated by an appropriate supervisor or inspector as noted on the example inspection forms in Appendix B. When applicable, each non-routine inspection report is signed and certified by the authorized inspector (typically an authorized API- or STI-certified inspector).

7.4 Record Maintenance

As indicated by Tables 7-1 and 7-2, records of all routine inspections and integrity tests shall be maintained for a minimum of 3 years. However, records of non-routine inspections and integrity tests shall be maintained for 5 years after the operational life of the storage tank system or lifetime of the equipment. Inspection records are located on the Main Campus in the Facilities Management Office at 1380 Jack Vest Drive, Johnson City, Tennessee 37614.

8.0 PERSONNEL TRAINING AND SPILL PREVENTION PROCEDURES

8.1 Personnel Instructions

112.7(f)(1): At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and the contents of the facility SPCC Plan.

The Environmental Compliance Manager will provide prevention, awareness, and response spill training to all new employees involved with oil equipment operation, maintenance, or oversight. Annual refresher training will be completed as well.

Spill Prevention, Control, and Countermeasure training topics for specific management/oil handlers include:

- Applicable pollution control laws, rules, and regulations
- Operation and maintenance of equipment to prevent oil discharges
- Purpose and overview of Spill Prevention, Control, and Countermeasure Plan
- Chemical and physical properties of materials transferred
- Potential spill areas and drainage routes
- Emergency response procedures
- Spill cleanup equipment locations and the use of the equipment
- Recent spill events, subsequent response and corrective action

Facility personnel involved in petroleum product handling attend sessions on safe-handling techniques, personal protection, and spill response. Spill response training is provided in conjunction with appropriate Occupational Safety and Health Administration and Resource Conservation and Recovery Act training programs at ETSU.

Intermediate training sessions are conducted for appropriate personnel when a process or procedure changes and for new employees who are responsible for implementing any portion of the SPCC Plan. Specific on-the-job training is provided as required by individual position. Annual refresher training and exercises are completed as well. Information may be conveyed via PowerPoint presentation, hand-outs, videos, or a combination therein.

Specific individuals designated as SPCC inspection personnel are also trained on what inspection procedures to use, the frequency of inspections, record keeping requirements, and procedures for reporting and correcting detected problems.

Employee training record forms are in Appendix C.

8.2 Designated Person Accountable for Spill Prevention

112.7(f)(2): Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

The Environmental Compliance Manager is the designated person accountable for spill prevention at the ETSU facility.

8.3 Spill Prevention Briefings

112.7(f)(3): Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

ETSU will schedule and conduct safety meetings that include periodic review of spill prevention. ETSU must also conduct annual training that includes the following discussions: (1) recent spill events, (2) causes of the spills, and (3) corrective action to prevent recurrence of similar spills. If the facility has not experienced a recent spill, spill scenarios will be presented and discussed to detail specific actions to be taken under a given scenario and how actions may differ between scenarios. Personnel responsible for the oil-storage areas/inspections and spill response personnel must be included in the SPCC briefings.

9.0 SITE SECURITY

112.7(g): Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.

9.1 Fencing and Gates

Many of the areas housing oil storage tanks are in limited access areas. For those that are in areas open to the public, the units are locked to limit access. Security is staffed and patrols facilities 24/7.

9.2 Flow and Drain Valves Secured

Tank and secondary containment drainage valves remain locked in the closed position when not in use.

9.3 Starter Controls Secured

Fuel dispensing at Facilities Management is locked with the use of a FuelMan system allowing only authorized personnel to dispense fuel. Dispensers on the empty 500-gallon tanks at Valleybrook are locked when not in use.

9.4 Pipeline Loading/Unloading Connections Secured

All piping is in service; however, when facility piping is taken out of service or placed in standby for an extended period, the owner/operator will comply with this requirement.

9.5 Lighting Adequate to Detect and Deter Spills

Lighting within the buildings is adequate to detect a discharge from oil containers. Outside the buildings, security lighting is provided. Lighting at the facilities is adequate to detect a discharge from oil containers and is such that a spill may be observed during hours of darkness, both by operating personnel and non-operating personnel (general public, local police, etc.), and spills are deterred from occurring through acts of vandalism.

Except for Item 2 below, (because incandescent lighting is being phased out), lighting at ETSU generally conforms to the industry standard (API 2610, Section 13.2.2), which recommends the following:

Industry Standard Consideration

(1)	Use high-intensity discharge lamps, such as mercury vapor or high-pressure sodium lighting. High-pressure sodium lighting is recommended because it provides high lumen output per watt. Application of either of these two types of lamps at low temperatures should be referred to the manufacturer for special consideration.
(2)	Intersperse incandescent lighting fixtures in areas that require immediate return of lighting after power dips or outages. The use of instant re-strike lighting eliminates the need for interspersed incandescent lighting.
(3)	Consider photoelectric cell control where automatic switching of yard and rack lighting is required.
(4)	Lighting fixtures installed in Class I, Division 1 and 2, and Group D locations should conform to the requirements of NFPA 30 and 70 and be maintained in good condition.

10.0 LOADING/UNLOADING OPERATIONS

112.7(a)(3)(ii): Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.)

Loading, unloading, and intrafacility transfer of oil products occur at ETSU. New quench oil is delivered to the facility by tanker truck on an as-needed basis. To fill the tank, the tanker truck is parked and chocked next to the tank. Before filling the tank, the truck should be closely inspected by the delivery driver for discharges at the lowermost drain and all outlets of the tanker. After the inspection, the tanker's discharge hose is attached to the inlet valve of the tank. This connection is outside the diked area; therefore, a bucket or absorbent material is placed under the connection to collect and contain any drips or leaks. The valve is normally in a closed and locked position. The Environmental Compliance Manager or designated personnel must be notified and present to unlock and supervise the loading procedure. Diesel fuels for the emergency generators are delivered on an as needed basis. Used oil is stored in a tote at the Turf Maintenance facility. For transport to offsite recycling, a contractor transfers the oil from the tote to a tanker truck.

The facility does not have any "loading/unloading racks" as defined by the U.S. EPA standard and is not subject to the requirements of 40 CFR 112.7(c) and 40 CFR 112.8(b). Rule 40 CFR 112(h) does not apply to transfer of fuel to shop-fabricated, end-use containers such as small ASTs, nor does it apply to fuel transfer into non-AST systems by commercial fuel transporters. Oil throughput associated with these systems and operations is considered low. For these operations, spill risk potential is managed in accordance with standard operating procedures described throughout this SPCC Plan.

Industry Standard Consideration

All oil transporters are required to meet the minimum requirements and regulations established by the U.S. Department of Transportation. The basis for these regulations is listed in this section as an industry standard consideration.

Industry Standard Consideration

All transporters of oil to and from this facility should meet the minimum requirements and regulations established by the U.S. Department of Transportation (USDOT). Although not all oils transferred at the facility are hazardous substances, it is recommended that the USDOT rules for transferring hazardous materials be followed as a best management practice. Loading/unloading procedures of hazardous materials are detailed in 49 CFR 172 (tank truck transfer). Key aspects are excerpted below for consideration:

Tank Truck Transfer:

(1) A qualified person must be in attendance at all times when a tank truck is loaded/unloaded.
(2) The attendant must be awake, have an unobstructed view of the tank truck, and be within 25 feet of the tank truck throughout the event.
(3) The attendant (or surveillance attendant) must be aware of the nature of the hazardous materials to be loaded/unloaded, trained on the procedures to be followed in emergencies, authorized to move the tank truck, and have a means to move the cargo tank.
(4) Manholes and valves must be closed and secured during transport.

In addition, current processes for loading/unloading at ETSU need to meet the following National Fire Protection Association (NFPA) requirements.

Industry Standard Consideration

An industry standard (Sections 28.4, 28.9, 28.10, and 28.11 of NFPA 30-2021) outlines the following loading/unloading operational guidelines that are applicable:

(1) Tank vehicle loading/unloading facilities should be separated from ASTs, buildings, and nearest property lines by a distance of 25 feet for Class I liquids and Class II and III liquids handled at temperatures at or above their flash points and 15 feet for Class II and III liquids handled at temperatures below their flash points.
(2) Loading/unloading facilities shall be provided with drainage systems or other means to contain spills.
(3) Before loading tank vehicles through open domes, a bonding connection shall be made to the vehicle or tank before dome covers are raised and shall remain in place until filling is completed and all dome covers have been closed or secured, unless one of the conditions of NFPA 30 Section 28.3.1 exists.
(4) When transferring Class I liquids or Class II or Class III liquids at temperatures at or above their flash points, engines of tank vehicles or motors of auxiliary or portable pumps shall be shut down during the making and breaking of hose connections.
(5) Equipment used for the transfer of Class I liquids between tanks shall not be used for Class II or Class III liquids, unless one of the conditions listed in NFPA 30 Section 28.10.1 exists.
(6) Liquids shall be loaded only into tanks whose material of construction is compatible with the chemical characteristics of the liquid (refer to Section 28.11 of NFPA 30-2021 for detailed loading/unloading guidelines).
(7) To prevent hazards due to a change in flash point of liquids, no tank car (rail) or tank vehicle that has previously contained a Class I liquid shall be loaded with a Class II or Class III liquid unless proper precautions are taken.

10.1 Adequate Secondary Containment for Loading and Unloading Racks

112.7(h)(1): Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle spills, use a quick drainage system for tank car or tank truck loading and unloading racks. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

ETSU loading/unloading operations do not satisfy the intended U.S. EPA definition of "loading/unloading rack"; therefore, this section is *not applicable*. However, as also discussed in Section 15.2, means must be provided to prevent a catastrophic spill from the largest compartment of a commercial tank truck from entering the storm water drainage system. The facility is required to have "best management practices" in place for this process. Best management practices in place for loading/unloading activities include having operators present at all times during loading/unloading and placing wheel chocks on the tank trucks to prevent movement during loading/unloading activities.

10.2 Warning or Barrier System for Vehicles

112.7(h)(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

ETSU loading/unloading operations do not satisfy the intended U.S. EPA definition of "loading/unloading rack"; therefore, this section is *not applicable*. However, it is common practice for drivers of tank trucks to use wheel chocks to prevent movement when loading fuel.

10.3 Vehicles Examined for Lowermost Drainage Outlets Before Leaving

112.7(h)(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

ETSU loading/unloading area does not satisfy the intended U.S. EPA definition of "loading/unloading rack"; therefore, this section is *not applicable*. However, it is general practice for the commercial tank truck driver to closely inspect the delivery truck for discharges at the lowermost drain and all outlets of the tanker prior to departure.

11.0 BRITTLE FRACTURE OR OTHER CATASTROPHE OF FIELD-CONSTRUCTED TANKS

112.7(i): If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

There are no field-constructed tanks at the facility; therefore, this requirement is *not applicable*.

12.0 CONFORMANCE WITH OTHER APPLICABLE REQUIREMENTS

112.7(j): In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

12.1 State of Tennessee Requirements

The State of Tennessee does not have any other requirements for spill prevention, control, and countermeasures. However, the State does have additional reporting requirements applicable to facilities with underground storage tanks and/or ASTs.

In Tennessee, spills that cannot be safely controlled or cleaned by facility personnel and/or that affect or threaten to affect navigable waters or adjoining shorelines must be reported to Tennessee Emergency Management Agency (TEMA) at 800-262-3300. Based on the information provided regarding the spill, TEMA will make the appropriate notifications to other agencies. However, ETSU is still legally responsible for making its own notifications. TEMA's phone number, along with that of other federal and state agencies, is in Table 17-1.

In addition, Tennessee Rules 0400-18-01-.05(4) and 68-215-127 require spills of 25 gallons or more to the environment to be reported to the Tennessee Department of Environment and Conservation (TDEC).[1] See Section 17 for more information.

12.2 Industry Standards

Discussions regarding conformance with the requirements of API, NFPA, STI standards, and other industry standards are integrated where applicable throughout this SPCC Plan. Additionally, NFPA 30 Flammable and Combustible Liquids Code specifies in Section 21.7.2.1, Identification for Emergency Responders, that a sign or marking that meets the requirements of NFPA 704 or another approved system be applied to storage tanks containing liquids. Section 21.7.2.2 of NFPA 30-2021 requires that unsupervised, isolated ASTs shall be secured and marked to identify the fire hazards of the tank and the tank's contents to the public. Where necessary to protect the tank from tampering or trespassing, the area where the tank is located shall be secured. EnSafe recommends that, if not already marked, ETSU mark each container accurately.

[1] A spill to the environment is defined in Section 17.3.2 of this Plan.

13.0 QUALIFIED OIL-FILLED OPERATIONAL EQUIPMENT

112.7(k): The owner or operator of a facility with oil-filled operational equipment that meets the qualification criteria in paragraph (k)(1) of this sub-section may choose to implement for this qualified oil-filled operational equipment the alternate requirements as described in paragraph (k)(2) of this sub-section in lieu of general secondary containment required in paragraph (c) of this section

1) Qualification Criteria-Reportable Discharge History: The owner or operator of a facility that has had no single discharge as described in §112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges as described in §112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war or terrorism); and
2) Alternative Requirements to General Secondary Containment. If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must:
   (i) Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and
   (ii) Unless you have submitted a response plan under §112.20, provide in your Plan the following:
      a) An oil spill contingency plan following the provisions of part 109 of this chapter.
      b) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Electrical Transformers

ETSU oil-filled electrical equipment does not have secondary containment due to electrical safety issues and design constraints. In lieu of general secondary containment, ETSU must establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and discharge; additionally, the facility must have an oil spill contingency plan and a written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful. In addition, spill response and absorbent materials are located throughout the facility. Any leaks identified are reported and corrected promptly.

Some of the pad-mounted transformers at ETSU are managed by ETSU and others are managed by the local utility company, Johnson City Power Board. The 79 pad-mounted transformers, which typically contain between 67 and 664 gallons of dielectric oil, are listed in Table 3-1. Pole-mounted transformers typically contain less than 55 gallons of dielectric oil and therefore are not addressed in this SPCC Plan.

Facility layout maps (Figures 3 and 5) show the locations of the 79 pad-mounted transformers. ETSU inspects the 6 oil-filled, pad-mounted transformers that they own and the 73 that are owned by Johnson City Power Board. The 79 pad-mounted transformers at ETSU are also visually inspected when a Johnson City Power Board representative is onsite to observe the meter readings or to address a reported problem. Refer to the forms in Appendix B for an example inspection log.

14.0 DRAINAGE CONTROL

14.1 Drainage from Diked Storage Areas

112.8(b)(1): Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

The two, 500-gallon ASTs at Valleybrook are stored in a concrete secondary containment dike under cover. The containment is not exposed to storm water but does have a valve that stays locked in the closed position when not being operated.

14.2 Valves Used on Diked Storage Areas

112.8(b)(2): Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an onsite wastewater treatment plant, you must inspect and may drain uncontaminated retained storm water, as provided in 112.8(c)(3)(ii), (iii), and (iv).

The drainage valves for the secondary containment associated with the two 500-gallon ASTs at Valleybrook are maintained locked and in the closed position when not being operated. Drainage from the containment is inspected prior to removal and is unlikely due to the presence of cover around the tanks.

14.3 Facility Drainage Systems from Undiked Areas

112.8(b)(3): Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

The generators, most of which have intrinsic secondary containment, and transformers are situated on concrete and asphalt. As such, spills in these areas would likely pool and flow radially. Large spills would possibly enter adjacent catch basins. An emergency response contractor will be notified for large spills (see Section 16).

14.4 Final Discharge of Drainage

112.8(b)(4): If facility drainage is not engineered as in 112.8(b)(3), equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

Storm water flows from the College of Medicine and Main Campus through a series of sheet flow to drainage ditches and catch basins to unnamed tributaries through and adjacent to the campus to Brush Creek and Sinking Creek. Storm water from the Valleybrook Campus generally flows east to a miscellaneous tributary to Kendrick Creek. Storm water from the Gray Fossil Site flows east via sheet flow to Ford Creek. Storm water from the Kingsport Campus flows northeast via sheet flow to aboveground and belowground conveyances to a miscellaneous tributary to North Fork Holston River.

If a spill should occur on the property that could not be contained onsite with spill materials including absorbents, pads, and socks, the Environmental Compliance Manager would contact the spill consultant. The spill consultant would identify the appropriate actions to clean the spill, including the use of an emergency response spill contractor.

14.5 Facility Drainage Systems and Equipment

112.8(b)(5): Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in §112.1(b) in case there is an equipment failure or human error at the facility.

Treatment of facility discharges does not occur onsite; therefore, this section is *not applicable*.

15.0 BULK STORAGE CONTAINERS/SECONDARY CONTAINMENT

15.1 Container Compatibility with its Contents

112.8(c)(1): You must not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

The oil storage containers used onsite are made of a material (i.e., steel or plastic) that is compatible with the storage containers' contents (e.g., oil), and therefore, the tanks conform to the relevant industry standard (NFPA 30-2021 Flammable and Combustible Liquids Code). Reference Table 3-1 for container content/capacity, container material, and good engineering (e.g., liquid level gauges). These oil storage containers are designed to operate under ambient atmospheric conditions for pressure and temperature.

15.2 Diked Area Construction and Containment Volume for Storage Containers

112.8(c)(2): You must construct all bulk storage container installations (except mobile refuelers and other non-transportation-related tank trucks) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

The SPCC rules are based on container size rather than the amount of oil maintained in the container. All oil storage containers 55 gallons and greater have adequate secondary containment.

15.2.1 Freeboard Determination

There are no diked areas associated with oil storage at the facility; therefore, this section is *not applicable*.

15.2.2 Adequacy of Secondary Containment

Oil storage containers at the facility have adequate secondary containment. The transformers do not require secondary containment.

Refer to the facility oil storage inventory in Table 3-1 for secondary containment details. The Executive Summary on page vii provides a summary of any regulatory deficiencies related to secondary containment.

15.2.3 Impermeability of Secondary Containment

Except for transformers and emergency generator diesel fuel storage tanks, oil storage containers are positioned within secondary containment (in covered areas with sumps, in buildings, with some areas having floor sumps to prevent releases from within the building). All containers are observed daily and are covered by a written monthly inspection program.

Because of the inspection and monitoring programs that are in place, a release of oil from the transformers or diesel from the generators would be detected expeditiously and contained on the ground surface via spill response protocols described in Section 17.

15.3 Diked Area Inspection and Drainage of Rainwater

112.8(c)(3): You must not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve sealed closed.
(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in §112.1(b).
(iii) Open the bypass valve and reseal it following drainage under responsible supervision.
(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with 40 CFR 122.41(j)(2) and 40 CFR 122.41(m)(3).

There are no diked areas exposed to storm water; therefore, this section is *not applicable.*

15.4 Corrosion Protection and Leak Testing of Buried Metallic Storage Tanks

112.8(c)(4): You must protect any completely buried metallic storage tank installed on or after January 10, 1974, from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

There are no buried metallic tanks at the facility; therefore, this section is *not applicable*.

15.5 Corrosion Protection of Partially Buried Metallic Tanks

112.8(c)(5): You must not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

There are no buried metallic tanks at the facility; therefore, this section is *not applicable*.

15.6 Aboveground Tank Periodic Integrity Assessment

112.8(c)(6): You must test or inspect each aboveground container for integrity on a regular schedule, and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, and the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. You must keep comparison records and you must inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph.

40 CFR 112.8(c)(6) directs the engineer to recommend integrity testing based on industry standards. Industry standards set integrity testing requirements (based upon AST type, size, installation, contents, corrosion rate, and previous inspection history) and determine a schedule of applicable inspections for each AST. For the tanks at ETSU, STI Standard for the Inspection of Aboveground

Storage Tanks (STI SP001-06) industry standard applies. The standard applies to steel tanks and portable containers. The aboveground storage containers at ETSU are constructed of steel. All shop-fabricated containers of oil at the facility have adequate spill control.

Oil containers at the facility are subject to monthly visual inspections for external integrity, adequate secondary containment, pipe and pipe connection integrity, and other related equipment using the inspection checklists in Appendix B. Completion of the inspections is tracked and records are maintained by the Environmental Compliance Manager. Integrity testing will be conducted as presented in Table 7-2.

All inspections conducted are required to be documented and records maintained onsite for 3 years. Formal inspections by an STI inspector should be maintained 5 years past the life of the tank.

Example inspection forms in Appendix B provide checklists that can be used during a typical visual inspection of a shop-fabricated tank. The fundamental components of the inspection are as follows:

- Structural integrity
- Attached piping
- Secondary containment
- Security

15.6.1 Shop-Fabricated Containers up to 5,000 gallons

Except for the one tank noted in Section 15.6.2, oil storage containers at the facility are classified as STI SP001-06 "Category 1" systems that are less than 5,000 gallons. In accordance with Table 5.5 of STI SP001-06, periodic (monthly and annual) visual inspections by the facility are the only type of integrity testing required for these containers. No periodic inspections by an STI inspector are required for these containers unless the monthly and annual inspections are not adequately documented.

15.6.2 Shop-Fabricated Steel ASTs 5,001 to 50,000 gallons

The 20,000-gallon diesel tank is the only shop-fabricated tank that falls into this size category and is classified as Category 1 systems greater than 5,000 gallons. In accordance with Table 5.5 of STI SP001-06, a formal external inspection by a certified STI inspector is required every 20 years for this tank. In addition, periodic (monthly and annual) visual inspections are required for this tank. Section 10.2.4 of STI SP001-06 stipulates that if the formal external inspection of a tank in this category determines that structural repairs are needed, a follow-up external inspection every 5 years will be required.

Additional Inspections Required to Follow-Up

Section 10.3.1 of STI SP001-06 stipulates that if any tank is found to have microbial influenced/induced corrosion, repairs must be promptly made, and a follow-up formal external or internal inspection must be made no more than 2 years after the discovery of the corrosion. If structural repairs are needed, a follow-up formal external/internal inspection every 5 years will be required.

Section 10.3.6.2 of STI SP001-06 states that if the tank has been exposed to a fire, natural disaster, excessive settlement, overpressure, or damage from cracking, the tank must be evaluated by an engineer experienced in AST design or by a tank manufacturer who will, jointly with the owner, determine if an immediate formal internal or external inspection is required. If a tank is exposed to fire or other means that could cause possible damage, it must be inspected by a certified inspector for serviceability and leaks before being put back into service. Consult with the tank manufacturer before making any alterations or repairs of leaks to a tank.

Section 10.4 of STI SP001-06 requires that a tank be taken out of service if a leak is found. The tank must then be repaired, replaced, or closed and removed from service in accordance with good engineering practices.

Required Integrity Testing for Future Shop-Fabricated ASTs and Requirements for Installation, Material Repair, and Recommissioning

For any new shop-fabricated tanks that may be installed in the future, ETSU should obtain certification of integrity testing from the manufacturer or installer before placing the tank into service. Likewise, if there is a material (significant) repair of any tank, the integrity of the tank must be tested by an appropriate method before the tank is returned to service.

15.6.3 Record Maintenance

Inspections must be documented and records maintained for at least 3 years by the Environmental Compliance Manager, or designee, performing the inspections. Some inspection records must be maintained for the life of the equipment plus 5 years. Tables 7-1 and 7-2 summarize required inspection and testing requirements for primary oil-containing structures at ETSU.

15.7 Control of Leakage through Internal Heating Coils

112.8(c)(7): You must control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

No tanks at this facility are equipped with internal heating coils; therefore, this section is *not applicable.*

15.8 Liquid-Level Sensing Devices

112.8(c)(8): You must engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid-level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities, an audible air vent may suffice.
(ii) High liquid-level pump cutoff devices set to stop flow at a predetermined container content level.
(iii) Direct audible or code signal communication between the container gauger and the pumping station.
(iv) A fast response system for determining the liquid-level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.
(v) You must regularly test liquid-level sensing devices to ensure proper operation.

Liquid Level Sensing Devices

ETSU uses multiple means to determine liquid level in oil storage containers, including manual gauging and electronic level indicators. The large tanks at the campus (i.e., 1,000-gallon diesel tank and ASTs located at generators) have a visual gauge (e.g., float, pop-up, dial, or clock gauges). OFOE at ETSU is restricted to transformers. Protection against tank overfill is achieved by (1) awareness of available tank capacity and inventory, (2) careful monitoring (either manually or automatically), and (3) control of product movement. At a minimum, direct audible or code signal communication between the container gauge and the individual transferring liquid is required.

Testing of Liquid Level Devices

Visual gauges are tested during tank transfer by manual gauging to confirm the visual gauge's accuracy. The level monitoring system must be regularly tested to ensure the operational performance of the liquid level sensing devices.

Industry Standard Consideration

All gauging equipment, detector instrumentation, and related systems should be inspected and tested annually, at a minimum, as outlined in NFPA 30-2021.

15.9 Observation of Disposal Facilities for Effluent Discharge

112.8(c)(9): You must observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b).

ETSU does not have an onsite wastewater treatment plant; therefore, this section is *not applicable*.

15.10 Visible Oil Leak Corrections from Tank Seams and Gaskets

112.8(c)(10): You must promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

Visible oil leaks from oil storage systems will be identified during the monthly visual inspections that are completed in accordance with Table 7-1 and the example forms in Appendix B. Additionally, operational personnel will be trained and instructed to notify a supervisor and the Environmental Compliance Manager if these conditions are observed. The Environmental Compliance Manager is responsible for requesting a cleanup contractor to remove any spilled oil from the facility and, if needed, ensuring the tank seams or gaskets are repaired promptly.

Johnson City Power Board will be contacted to repair any observed utility-owned leaking transformers.

15.11 Appropriate Position of Mobile or Portable Oil Storage Containers

112.8(c)(11) You must position or locate mobile or portable oil storage containers to prevent a discharge as described in §112.1(b). Except for mobile refuelers and other non-transportation-related tank trucks, you must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

Table 3-1 includes a tote oil storage container that is in use at ETSU and also lists the general means and adequacy of containment.

16.0 FACILITY TRANSFER OPERATIONS, PIPING, AND PUMPING

16.1 Buried Piping Installation Protection and Examination

112.8(d)(1): Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in 40 CFR 280 or a state program approved under 40 CFR 281. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

There are short runs of fiberglass piping from USTs to generators which are not required to be catholically protected. The USTs are identified in Table 3-1. The exposed transition piping from the generators to the buried piping will be inspected for damage during monthly routine inspections of the generators.

16.2 Not-In-Service and Standby Service Terminal Connections

112.8(d)(2): Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

ETSU has no piping considered "not-in-service or on standby"; therefore, this section is *not applicable*.

16.3 Pipe Supports Design

112.8(d)(3): Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

There are no pipe supports associated with the AST; therefore, this section is *not applicable*.

16.4 Aboveground Valve and Pipeline Examination

112.8(d)(4): Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

Table 7-1 in Section 7 indicates requirements for routine and periodic inspections of aboveground piping. Routine inspections of valves, piping, hoses, and appurtenances can be inspected using the inspection form in Appendix B to look for leaks, misalignment, vibration, supports, corrosion, and miscellaneous items. Operational personnel will be trained and instructed to notify the SPCC contacts listed in Section 2.2 any time leaks or signs of deterioration are observed.

16.5 Aboveground Piping Protection from Vehicular Traffic

112.8(d)(5): Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

ASTs located at ETSU are protected from vehicular traffic by use of bollards. Some of the generators have runs of buried piping, but the exposed transition piping is in a location such that strikes from vehicular traffic are unlikely. Hoses from the dispensing pump and dispensing nozzle are stored in a manner that prevents damage from vehicular traffic.

17.0 SPILL RESPONSE AND REPORTING PROCEDURES

SAFETY WARNING

Spilled fuel constitutes a fire and explosion hazard with the threat to human life and destruction of property. Petroleum vapors are also hazardous to personnel due to anesthetic and toxic concentrations below explosive levels. Volatile fuel may cause skin irritation if allowed to remain on the skin (e.g., soaked gloves and/or clothing). Personnel safety and protection of life and environment take precedence over property protection. If there is a threat to personnel safety, the local Fire Department should be the first official agency notified. Special precautions should be exercised when handling diesel or gasoline.

17.1 Spill Control Equipment and Materials

ETSU has adequate discharge response capability, equipment, and personnel to contain most discharges. ETSU provides spill response equipment in several locations within and around the campus, as shown in Appendix A. Various pieces of equipment such as front- end loaders, back hoes, shovels, rakes, brooms, etc. are available for use in the event of a spill.

The following spill response equipment and materials are available onsite at ETSU:

- Adsorbent Pads and Booms
- Adsorbent Granules
- Oil Emulsifier
- Shovels/Rakes
- 55-gallons drums
- Front End Loader
- Two-Way Radios
- Cellular phones

All members of the Spill Response Team, as well as other authorized ETSU personnel, are provided two-way radios or cellular phones for internal communications. In-plant telephone lines are also available for campus personnel to contact members of the Spill Response Team to report spills. Due to the close proximity of the two operational areas and the established internal communications system, it is possible for the mobile spill response trailer to be dispatched to the location of a spill in a timely manner.

Additionally, ETSU will contact the spill consultant if additional support is required by an outside discharge response contractor to respond to releases and control releases.

17.2 Discharge Notifications

ETSU personnel who identify an oil spill or release are instructed to notify the Spill Response Coordinator or ETSU Security. Spill-related emergency contacts are made on many levels, primarily local and regional.

Table 17-1 provides a prioritized telephone contact list. Notification will include the following (if known): amount and type of oil spilled, the source of the discharge, and the time the event occurred. When reporting a spill, include the information in the Response Notification Form in Appendix D.

Table 17-1
Emergency Notification Phone List

Prioritized Contact List	Response Role	Day Phone	24 Hour Phone
Initial Contact Michael Barrett, Environmental Compliance Manager	Contact Qualified Individual	423-439-6029	423-202-1237
Facility Qualified Individual/Incident Commander Name: Mark Jee Response Time: 1 Hour	Facility Qualified Individual Incident Command and Control	423-439-7785	423-741-5272
Alternate/Deputy Facility Incident Commander Name: Facility Maintenance Response Time: 1 Hour	Alternate Facility Qualified Individual Assist with Incident command and control	423-439-7900	423-439-7900
ETSU Public Safety Office	Traffic Control, Evacuation, Crowd Control	423-439-4480	423-439-4480
Tennessee Emergency Management Agency	Incident Reporting, RQ Spill, notifier of federal and state agencies	800-262-3300	800-262-3300
National Response Center	Receiver of all reports of spills to waters of the U.S., or potential to affect waters.	800-424-8802	800-424-8802
Johnson City Police Department	Traffic Control, Evacuation, Crowd Control	911 423-434-6160	911 423-434-6160
Johnson City Fire Department	Emergency Medical Fire suppression support	911 423-975-2840	911 423-975-2840
Washington County Emergency Management Agency	Incident Reporting, RQ Spill	423-434-6081	423-434-6081
Tennessee Department of Environment and Conservation (Johnson City Environmental Field Office)	RQ Spill, NPDES, Storm Water Permits	423-854-5400	888-891-8332
U.S. EPA Region 4, Emergency Response Branch (24-hour)	Spill prevention or spill response information	404-562-8700	404-562-8700
Washington County Sheriff's Department	Traffic Control Evacuation Crowd Control	911 423-788-1414	911 423-788-1414
Hospital Johnson City Medical Center 400 N. State of Franklin Road Johnson City, TN 37604	Medical Support	911 423-431-6111	911 423-431-6111
Washington County EMS	Ground Ambulance Service	911 423-975-5500	911 931-759-7861
Air Critical Care	Helicopter Ambulance Service	800-550-1025	800-550-1025
CHEMTREC — Technical Support	Hazardous chemical response advice and manufacturer/ supplier referral/notifications	800-424-9300	800-424-9300
EnSafe (Spill Consultant)	Provide response expertise Provide 3rd party spill response contractor for cleanup activities.	615-255-9300, but 888-590-8885 if an emergency	888-590-8885
CHEMTREC Referral Center (non-emergency)	Technical Support	800-262-8200	800-262-8200

Notes:

NPDES	=	National Pollutant Discharge Elimination System
RQ	=	Reportable quantity
U.S. EPA	=	United States Environmental Protection Agency
HAZMAT	=	Hazardous Materials

17.3 Spill Response Procedures

A prompt and adequate response to any spill of petroleum at ETSU is mandatory. Regardless of the size or scope of the spill, all releases should be reported to Environmental Compliance Manager. If the spill is large and cannot immediately be stopped (i.e., by shutting off a machine, closing a valve, etc.), the initial action to be taken by the individual discovering the spill should be to evacuate the area.

The general response procedure is outlined in the following subsections. Spill response procedures and initial contacts are also summarized in the Red Plan located at the back of this SPCC Plan.

17.3.1 Procedures for Individual Who Discovers Spill

An employee who discovers a spill shall:

- Ensure employee safety.
- Briefly assess the severity of the spill, determining the extent and nature of the event.
- Report spills of any size that cannot be contained or cleaned up by onsite personnel, and/or that affects or threatens to affect navigable waters or adjoining shorelines using the contacts in Table 17-1, Emergency Notification Phone List. Report location of occurrence, type of occurrence, and if it involves injuries.

17.3.2 Procedures for Spill Response Personnel

The steps outlined below will be followed:

1. Determine if the spill represents a release to the environment.

    a. A **release** means any spilling, leaking, pumping, pouring, escaping, leaching, or disposing into the environment.

    b. The **environment** is defined as:

        - The navigable waters of the United States.
        - Any other surface water, ground water, drinking water supply, land surface, or subsurface strata, or ambient air within the United States.

- The Johnson City storm sewer or wastewater treatment plant via the sanitary sewer.

c. **Any release that gets outside of a building or outside of an impervious containment area should be considered a release to the environment.**

2. Determine if the quantity of material spilled represents a harmful (or reportable) quantity.

   A **harmful (reportable) quantity** of oil is defined as that which:

   a. Violates applicable water quality standards.

   b. Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, or a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

   c. Enters the storm sewer system.

   d. Includes a spill of 25 gallons or more to the environment.

   e. Includes all spills that affect or threaten to affect navigable waters or adjoining shorelines.

3. Refer to Table 17-1, Emergency Notification Phone List for the Environmental Compliance Manager, to identify actions to take and agency(ies) to contact when a spill of oil occurs.

   Information to be provided orally when reporting a spill includes the following:

   a. Time of the spill.

   b. Identity of the material spilled.

   c. Approximate quantity spilled.

   d. Location and source of the spill.

e. Cause and circumstances of the spill.

f. Existing or potential hazards (fire, explosion, etc.), if any.

g. Personal injuries or casualties, if any.

h. Corrective action being taken and an approximate timetable to control, contain, and clean up spill.

i. Name(s) and telephone number(s) of individual(s) who discovered and/or reported the spill.

j. Other unique or unusual circumstances.

4. For any spill of petroleum leaving the property and entering a drainage canal or storm drain, IMMEDIATELY NOTIFY:

Tennessee Division of Water Resources
Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, Tennessee 37601
423-854-5400
888-891-8332

Following cleanup, ensure that the appropriate written reports are completed, and if necessary, submitted to governing regulatory agencies. See Section 18.

For small spills (i.e., those that do not place personnel at risk for exposure above the permissible exposure limits), facility personnel may be directed by the Environmental Compliance Manager to initiate containment/cleanup. Appropriate personal protective equipment will be donned and the proper cleanup materials (i.e., booms, absorbents, etc.) utilized. Spent absorbent materials should be placed in appropriate containers (i.e., drums kept with the spill kits) for disposal offsite. All waste products generated by spill cleanup will be managed per applicable local, state, and federal regulations. All equipment used during spill cleanup operations should be immediately replaced in the spill kit to maintain inventory. The Environmental Compliance Manager will inspect the area post-cleanup to verify that efforts were sufficient and that waste was properly packed for offsite disposal.

The Environmental Compliance Manager should be contacted immediately if a large oil/hazardous materials release occurs. Large spill cleanup may be handled by a third-party emergency response contractor as coordinated by the spill consultant. Contact information is in Table 17-1.

If a large spill occurs, efforts should be made to prevent oil/hazardous materials from reaching storm drains or surrounding surface waters or permeating into the ground which could contaminate groundwater. While these efforts are underway, the Environmental Compliance Manager will contact the spill consultant. The spill consultant has contracts with three emergency response contractors for statewide response activities. An emergency response contractor will be called to respond, when appropriate. The following steps should be taken in the event of a large release:

- Determine a spill is occurring.
- Immediately notify the Environmental Compliance Manager.
- The Environmental Compliance Manager contacts the spill consultant and notifies appropriate/applicable local/state/federal agencies.
- When appropriate, the spill consultant contacts a third-party emergency response contractor.
- An area ahead of the spill should be diked prior to the arrival of the emergency response contractor to contain the spill onsite (whenever possible).
- The contractor will remediate the spill, under the supervision of facility personnel.

18.0 WRITTEN SPILL REPORT GUIDELINES

This section addresses written spill reporting requirements for onshore facilities and for internal record keeping requirements.

18.1 Amendment of SPCC Plans by Regional Administrator

112.4(d) Amend your Plan, if, after review by the Regional Administrator of the information you submit under paragraph (a) of this section, or submission of information to EPA by the State agency under paragraph (c) of this section, or after onsite review of your Plan, the Regional Administrator requires that you do so. The Regional Administrator may require you to amend your Plan if he finds that it does not meet the requirements of this part or that amendment is necessary to prevent and contain discharges from your facility.

(e) Act in accordance with this paragraph when the Regional Administrator proposes by certified mail or by personal delivery that you amend your SPCC Plan. If the owner or operator is a corporation, he must also notify by mail the registered agent of such corporation, if any and if known, in the State in which the facility is located. The Regional Administrator must specify the terms of such proposed amendment. Within 30 days from receipt of such notice, you may submit written information, view, and arguments on the proposed amendment. After considering all relevant material presented, the Regional Administrator must either notify you of any amendment required or rescind the notice. You must amend your Plan as required within 30 days after such notice, unless the Regional Administrator, for good cause, specifies another effective date. You must implement the amended Plan as soon as possible, but no later than six months after you amend your Plan, unless the Regional Administrator specifies another date.

According to 40 CFR 112.4, ETSU is required to report a spill event to the regional administrator of U.S. EPA if the spill meets either of the criteria shown at right. The owner or operator of the facility shall submit a written report **within 60 days** of the date of the spill. The following information must be provided in the report:

U.S. EPA Spill Event Criteria

1. Greater than 1,000 gallons of oil into or upon the navigable water of the United States or adjoining shorelines in a single spill event.

OR

2. More than 42 gallons of oil in each of two discharges occurring within any 12-month period.

- Name of the facility.
- Name of person reporting spill.
- Location of the facility.
- Maximum storage or handling capacity of the facility and normal daily throughput.
- Corrective action and countermeasures taken, including a description of equipment repairs and replacements.
- An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary.

- The cause of such discharge as described in §112.1(b), including a failure analysis of the system or subsystem in which the failure occurred.

- Additional preventive measures taken or contemplated to minimize the possibility of recurrence.

- Such other information as the Regional Administrator may reasonably require pertinent to the SPCC Plan or discharge.

This information will be submitted to the U.S. EPA at the following address:

U.S. EPA Region 4
Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960
404-562-9900

A complete copy of all information provided to the Regional Administrator shall also be sent within 5 days to the TDEC, Division of Water Resources at the following address:

Tennessee Division of Water Resources
Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, Tennessee 37601
423-854-5400
888-891-8332

If required by the Regional Administrator after his review of the spill event information or an onsite review of the SPCC Plan, ETSU will amend its SPCC Plan. ETSU will amend the SPCC Plan within 30 days after receipt of notice from the Regional Administrator, unless the Regional Administrator, for cause, specifies another effective date. ETSU will implement the amended SPCC Plan as soon as possible, but not later than 6 months after SPCC Plan amendment, unless the Regional Administrator specifies another date.

18.2 State Agency Report

ETSU is required to report any spill event of 25 gallons or more to TDEC Division of Water Resources within 72 hours if it meets any of the following criteria:

- "violates applicable water quality standards, or
- causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines," or
- Includes any spill of 25 gallons or more to the environment (Tennessee Rules 0400-18-01-.05(4) and 68-215-127).

In addition, spills of any amount that cannot be contained or cleaned up by onsite personnel and/or affect or threaten to affect navigable waters require notification of TEMA. Within 15 days of a reportable event, submit a written report to:

Tennessee Emergency Management Agency
3041 Sidco Drive
Nashville, Tennessee 37204

18.3 Internal Spill Report

Any spill requiring emergency cleanup should be logged for internal record keeping, using the Response Notification Form, in Appendix D. The report should be completed by the facility representative who led the emergency response. Spill reports should be kept on file for at least 3 years following the event. In addition, copies of all written spill reports are to be submitted to the Department of General Services Environmental Compliance Manager via email to Laura.Waynick@tn.gov or via mail to following address:

Laura Waynick, Environmental Compliance Manager
Department of General Services
Tennessee Tower, 24th Floor
312 Rosa L. Parks Avenue
Nashville, Tennessee 3724