EAST TENNESSEE STATE UNIVERSITY

Facilities Management

Policy Number: 700.33
Title: Spill Prevention, Control, and Countermeasure Policy
Implementation Date: November 28th, 2016

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: _____
William Brady Rasnick, Jr., Associate Vice President, Facilities Management

Date approved: _____

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

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

Prepared for:

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

Prepared by:

220 Athens Way, Suite 410
Nashville, Tennessee 37228
615.255.9300/1.800.588.7962
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EnSafe Contract: 529/000-04-2012
SES No.: GS.460.000.05
PITTS No.: TB.166.005
EnSafe Project Number: 0888813060

August 2016

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 (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. 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 ETSU 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 Spill Prevention, Control, and Countermeasure (SPCC) Plan for East Tennessee State University 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
EnSafe Inc.	May 2016	X	

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.

PROFESSIONAL ENGINEER'S CERTIFICATION

In accordance with 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, U.S. 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 September 2011.

8/22/2016

Signature
Date

Geoffrey C. Pope, PE
State of Tennessee, PE No. 111865

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 (ETSU) in Johnson City, Tennessee, was developed per 40 CFR 112. This plan amends and supersedes the previous SPCC Plan dated September 2011.

There are four regulatory deficiencies identified below:

112.7(c) and 112.8(c)(2) — No secondary containment is provided for the used cooking oil aboveground storage tank (AST) under the emergency generator. The capacity of secondary containment must be equivalent to, or greater than, the primary container capacity (i.e., 208 gallons).

112.7(h) — There were no available written standard operating procedures for loading and unloading of oil from tanks. A written plan needs to be implemented to provide proper guidelines for loading and unloading at the facility.

112.8(d)(5) — There are no bollards located around the 560-gallon diesel AST and the associated generator at the Mini Dome or the 550-gallon AST to the generator at Brooks Gym, both located on the main campus. Tanks must either be capable of resisting damage from the impact of a motor vehicle or collision barriers shall be provided.

The following Best Engineering Practices are also recommended for ETSU:

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.

The 6,000-gallon underground storage tank (UST) at College of Medicine Building #178 is not currently registered with the Tennessee Department of Environment and Conservation, Division of Underground Storage Tanks (TDEC DUST); therefore, it will be treated as a tank required to adhere to 40 CFR 112 and this SPCC Plan until it is registered with TDEC DUST. It is recommended that the 6,000-gallon UST be registered with TDEC DUST to achieve compliance with 40 CFR 280, Tennessee Code Annotated 68-215-103, and TDEC Rule 0400-18-01.03.

The 20,000-gallon diesel AST at the main campus power plant is 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 test is due in 2018.

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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, 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. 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 (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 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; 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, oil filled operational equipment 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 (OWS) 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)	16.0
Changes Required by Regional Administrator Implemented	40 CFR 112.4(d),(e)	17.1
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 15.0
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)	4.0 and 16.0
Methods of Disposal of Recovered Materials	40 CFR 112.7(a)(3)(v)	16.0
Contact List and Telephone Numbers	40 CFR 112.7(a)(3)(vi)	16.0
Discharge Reporting Procedures	40 CFR 112.7(a)(4)	2.2, 16.2
Discharge Emergency Response Procedures	40 CFR 112.7(a)(5)	16.0
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
Drainage Control	40 CFR 112.8(b)(1-5)	13.0
Drainage from Diked Storage Areas	40 CFR 112.8(b)(1)	13.1
Valves Used on Diked Storage Areas	40 CFR 112.8(b)(2)	13.2
Plant Drainage Systems from Undiked Areas	40 CFR 112.8(b)(3)	13.3
Final Discharge of Drainage	40 CFR 112.8(b)(4)	13.4
Facility Drainage Systems and Equipment	40 CFR 112.8(b)(5)	13.5
Bulk Storage Tanks/Secondary Containment	40 CFR 112.8(c)(1-11)	14.0
Container Compatibility with Its Contents	40 CFR 112.8(c)(1)	14.1
Diked Area Construction and Containment Volume for Storage Containers	40 CFR 112.8(c)(2)	14.2

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

Topic	CFR Citation	Spill Prevention, Control, and Countermeasure Plan Page or Section
Diked Area, Inspection, and Drainage of Rainwater	40 CFR 112.8(c)(3)	14.3
Corrosion Protection of Buried Metallic Storage Tanks	40 CFR 112.8(c)(4)	14.4
Corrosion Protection of Partially Buried Metallic Tanks	40 CFR 112.8(c)(5)	14.5
Aboveground Tank Periodic Integrity Assessment	40 CFR 112.8(c)(6)	14.6
Control of Leakage through Internal Heating Coils	40 CFR 112.8(c)(7)	14.7
Liquid-Level Sensing Devices	40 CFR 112.8(c)(8)	14.8
Observation of Disposal Facilities for Effluent Discharge	40 CFR 112.8(c)(9)	14.9
Visible Oil Leak Corrections from Tank Seams and Gaskets	40 CFR 112.8(c)(10)	14.10
Appropriate Position of Mobile or Portable Oil Storage Containers	40 CFR 112.8(c)(11)	14.11
Facility Transfer Operations	40 CFR 112.8(d)(1-5)	15.0
Buried Piping Installation Protection and Examination	40 CFR 112.8(d)(1)	15.1
Not-In-Service and Standby Service Terminal Connections	40 CFR 112.8(d)(2)	15.2
Pipe Supports Design	40 CFR 112.8(d)(3)	15.3
Aboveground Valve and Pipeline Examination	40 CFR 112.8(d)(4)	15.4
Aboveground Piping Protection from Vehicular Traffic	40 CFR 112.8(d)(5)	15.5

2.0 FACILITY INFORMATION

2.1 Facility Owner/Operator, Address, and Telephone:

SPCC Plan Administrator: Mike Barrett, Environmental Safety and Health (EHS) Manager

Facility Owner: State of Tennessee

Facility Operator: East Tennessee State University

Address: Main Campus
1276 Gilbreath Drive
Johnson City, Tennessee 37604
(423) 439-1000

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

ETSU at Kingsport
1501 University Boulevard
Kingsport, Tennessee 37660
(423) 392-8000

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

Facility Contacts:

Primary: Mike Barrett, EHS Manager
(423) 439-6029 (Office)
(423) 202-1237 (Cell)

Secondary Contact: Don O'Brien, EHS Director
(423) 439-4081 (Office)
(423) 483-3862 (Cell)

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
Mike Barrett, EHS Manager	(423) 439-6029	(423) 202-1237
Don O'Brien, EHS Director	(423) 439-4081	(423) 483-3862
Maintenance (24 hour)	(423) 439-7900	(423) 439-7900
Public Safety Office (24 hour)	(423) 439-4480	(423) 439-4480
Eastman Valleybrook Campus Maintenance Coordinator	(423) 349-5357	(423) 930-0060
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) 741-9225	(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. The facilities house several dormitories, a fueling center, maintenance facilities, 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, a 4,000-gallon diesel UST for fueling, and a 560-gallon UST associated with a generator. 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.

The 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 9:00 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 the ETSU's main campus and College of Medicine flows via aboveground and belowground storm water conveyance. Some is comingled with Johnson City storm water drainage form roadways and the surrounding businesses. All storm water on these two sites flows to unnamed tributaries through and near campus to Brush Creek and Sinking Creek.

Storm water from Valleybrook flows east to an unnamed tributary to Kendrick Creek via aboveground and belowground storm water conveyance.

Storm water from the Gray Fossil Site flows via sheet flow to aboveground and belowground conveyances to Ford Creek approximately 200 feet away.

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 2-8 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 and oil-filled operational equipment identified at the facility that are subject to SPCC requirements, which includes multiple aboveground storage tanks (ASTs), underground storage tanks (USTs), totes, drums, generators, and oil-filled equipment. 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 10.0 and 15.0 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 has 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.

There are currently no permanently closed tanks at this facility. However, periodically, generators and other mobile tanks may be present in the Central Receiving area either for storage for future use or awaiting removal. At the time of inspection, a 145-gallon generator was present. It is required that this area and any tanks present be inspected monthly with the other SPCC areas/tanks.

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
Physical Plant 	AST	Steel/Steel	Y/Y	Visible clock gauge, emergency shut-off, audible overfill alarm, locked fill port	E-85/1,000	>1,000	June 2008	South and east in concrete storm water trench to curb inlet.	Double-walled
Valleybrook Gas (Left) 	AST	Steel/NA	N/N	Visual observation, manual gauge	Gasoline/500 (EMPTY)	>550	1995	Radial to concrete containment /East to unnamed tributary to Kendrick Creek.	Located in concrete secondary containment with cover.
Valleybrook Diesel (Right) 	AST	Steel/NA	N/N	Visual observation, manual gauge	Diesel/500 (EMPTY)	>550	1995	Radial to concrete containment /East to unnamed tributary to Kendrick Creek.	Located in concrete secondary containment with cover.
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 basins.	Secondary containment structure.

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 Generator 	AST	Steel/Steel	Y/NA	Visible clock gauge, emergency shut-off, audible overfill alarm, locked fill port	Diesel/550	>550	UK	Southeast across concrete to catch basin.	Double-walled.
Main Campus D.P. Culp University Center 	AST	Steel/NA	N/NA	Visual observation	Used cooking oil/200	None	UK	Southeast across asphalt and into catch basin.	None
Generators									
Main Campus Buccaneer Ridge Building R and S 	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.

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 	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 and 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.
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 grass.	Double-walled.

Table 3-1
Facility Oil Storage Inventory

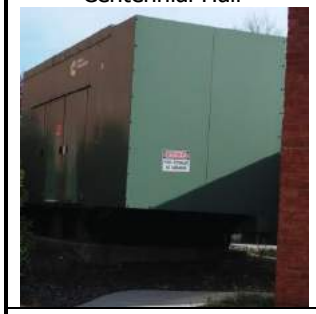
Location Description	Container Type	Container / Pipe Material	Double-Walled Tank/ Piping	Good Engineering Practice	Contents/ Capacity (gal)	Secondary Containment Capacity (gal)	Year Installed	Flow Direction/ Receiver	Containment / Diversion Structure
Main Campus Centennial Hall 	Generator	Steel/NA	Y/NA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

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 MSHA (Mini-Dome) Generator 	AST	Steel/Steel	Y/N	Visible clock gauge, emergency shut-off, audible overfill alarm, locked fill port	Diesel/560	>560	1977	Radial to surrounding concrete.	Double-walled.
Main Campus 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 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 	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 Building #6 	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 Building #119 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/710	>710	2013	Radial to surrounding concrete pad.	Double-walled
College of Medicine Clinical Education Building 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/300	>300	2013	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
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/200 feet to Ford Creek	Double-walled.
Valleybrook 	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.
Community Health 	Generator	Steel/NA	Y/NA	Visual of tank, weekly load test, level gauge	Diesel/217	>217	2012	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
Drums and Totes									
Physical Plant 	Drums	Steel, Plastic/NA	N/NA	Visual observation through bung hole, stored inside building with impervious floor, spill pallets	Product oil/16@55	None	NA	Contained in spill pallets and building.	Located indoors, concrete floor, floor drains blocked
Physical Plant 	Tote	Polyurethane /NA	N/NA	Visual inspection, stored inside building with impervious floor	Used oil/275	>275	UK	Contained in spill pallets and building.	Located indoors, concrete floor, floor drains blocked
Equipment Reservoirs/Pits/Equipment									
College of Medicine Building #4 Medical School Library (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #119 College of Medicine West Elevator (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	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 Building #119 East Elevator (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #178 Stanton Gerber Hall #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #178 Stanton Gerber Hall #2 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #178 Stanton Gerber Hall Service (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #2 Ed Allan Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #6 William L. Jenkins Forensics Center (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
College of Medicine Building #7 Pharmacy School (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	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	NA	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	NA	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 Building #92 Culp University Center Passenger (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #92 Culp University Center Service (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #330 Basler Center for Physical Activity (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #20 Roy Hicks Hall #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #20 Roy Hicks Hall #2 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #10 Gilbreath (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #21 Rogers-Stout West (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	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 Building #21 Rogers-Stout East (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #18 Hutcheson Passenger (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #12 Sam Wilson Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #6 Ernest C. Ball Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #14 Burleson Hall (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #353 Governors Hall #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Main Campus Building #353 Governors Hall #2 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Gray Fossil Site #1 (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	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
Eastman Valleybrook Campus (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/110	>110	NA	Contained in building	Located indoors
ETSU at Kingsport (Photo not available)	Elevator reservoir	NA	NA/NA	Visual inspection, regular service	Hydraulic oil/>55	>55	NA	Contained in building	Located indoors
Transformers[1]									
VA Campus Building #119	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/180	NA	UK	Radial/ surrounding ground	None/none
VA Campus Building #119	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/180	NA	UK	Radial/ surrounding ground	None/none
VA Campus 5th Street @ Oak Drive	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/240	NA	UK	Radial/ surrounding ground	None/none
VA Campus 5th Street @ Maple Street	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/>259	NA	UK	Radial/ surrounding ground	None/none
VA Campus Behind Building #4	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/344	NA	UK	Radial/ surrounding ground	None/none
VA Campus Building #178	ETSU Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/480	NA	UK	Radial/ surrounding ground	None/none
Mini-Dome 49250	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/447	NA	UK	Radial/ surrounding ground	None/none
Mini-Dome 51502	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
Mini-Dome 49249	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/447	NA	UK	Radial/ surrounding ground	None/none
Mini-Dome 42563	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/258	NA	UK	Radial/ surrounding ground	None/none
Ernest Ball Hall 42570	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/247	NA	UK	Radial/ surrounding ground	None/none
Burleson Hall 54964	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/319	NA	UK	Radial/ surrounding ground	None/none
D. M. Brown Hall 42709	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/222	NA	UK	Radial/ surrounding ground	None/none
D. M. Brown Hall 43372	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/384	NA	UK	Radial/ surrounding ground	None/none
Alexander Hall "University School" 34500	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/146	NA	UK	Radial/ surrounding ground	None/none
Burgin-Dossett Hall 43793	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/264	NA	UK	Radial/ surrounding ground	None/none
Rogers-Stout Hall 45058	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/178	NA	UK	Radial/ surrounding ground	None/none
Centennial Hall 47660	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/263	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
Reece Museum 44947	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Gilbreath Hall 45738	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/204	NA	UK	Radial/ surrounding ground	None/none
Carter Hall 48494	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/235	NA	UK	Radial/ surrounding ground	None/none
John Lamb Hall 42571	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/386	NA	UK	Radial/ surrounding ground	None/none
John Lamb Hall 54965	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/386	NA	UK	Radial/ surrounding ground	None/none
Nursing 26748	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Nursing 26749	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Nursing 32405	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Hutcheson Hall 42565	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/247	NA	UK	Radial/ surrounding ground	None/none
Harry D. Powell Observatory (No Number Provided)	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	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
Sam Wilson Hall 42564	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/247	NA	UK	Radial/ surrounding ground	None/none
Brooks Gym 42567	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/256	NA	UK	Radial/ surrounding ground	None/none
Power Plant 54966	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/348	NA	UK	Radial/ surrounding ground	None/none
Clack Building 54982	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/664	NA	UK	Radial/ surrounding ground	None/none
Clack Building 54983	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/664	NA	UK	Radial/ surrounding ground	None/none
Clack Building 49021	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/593	NA	UK	Radial/ surrounding ground	None/none
Clack Building 49022	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/593	NA	UK	Radial/ surrounding ground	None/none
Clack Building 49023	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/415	NA	UK	Radial/ surrounding ground	None/none
Warf Pickel Hall 42569	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/249	NA	UK	Radial/ surrounding ground	None/none
Warf Pickel Hall 42568	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/258	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
Wilson Wallis Hall 44052	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/153	NA	UK	Radial/ surrounding ground	None/none
Sherrod Library 50635	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/304	NA	UK	Radial/ surrounding ground	None/none
Sherrod Library 54984	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/529	NA	UK	Radial/ surrounding ground	None/none
D. P. Culp Center 42566	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/384	NA	UK	Radial/ surrounding ground	None/none
D. P. Culp Center 42566	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/594	NA	UK	Radial/ surrounding ground	None/none
Dormitory 46091	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/260	NA	UK	Radial/ surrounding ground	None/none
Dormitory 21080	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Dormitory 24285	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Dormitory 26750	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/70	NA	UK	Radial/ surrounding ground	None/none
Soccer Field 44057	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
Soccer Field 47956	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/215	NA	UK	Radial/ surrounding ground	None/none
Betty Basler Field – Softball Stadium 47680	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/215	NA	UK	Radial/ surrounding ground	None/none
Basler Center for Physical Activity 54985	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/202	NA	UK	Radial/ surrounding ground	None/none
Physical Plant 150/JC_201	Transformer /Junction Cube	Steel/NA	NA/NA	Visual observation	Mineral Oil/220	NA	UK	Radial/ surrounding ground	None/none
Luntsford Apartments 45584	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/125	NA	UK	Radial/ surrounding ground	None/none
Nell Jennings Dossett Hall 46096	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Ross Hall Panhallenic 46087	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Powell Hall 46089	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/144	NA	UK	Radial/ surrounding ground	None/none
Lucille Clement Hall 46187	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/214	NA	UK	Radial/ surrounding ground	None/none
Lucille Clement Hall 44809	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/203	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
Lucille Clement Hall 45825	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/147	NA	UK	Radial/ surrounding ground	None/none
Stone Hall 48457	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/56	NA	UK	Radial/ surrounding ground	None/none
WETS Radio 42430	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/102	NA	UK	Radial/ surrounding ground	None/none
WETS Radio 48641	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/368	NA	UK	Radial/ surrounding ground	None/none
Centennial Drive 49248	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/393	NA	UK	Radial/ surrounding ground	None/none
Central Receiving Plant 36182	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/125	NA	UK	Radial/ surrounding ground	None/none
Central Receiving Plant 45390	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/117	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 34646	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/67	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 34645	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/67	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 36491	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/104	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
Buccaneer Ridge Apts. 36495	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/104	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 35591	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/87	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 36344	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/104	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 42427	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/71	NA	UK	Radial/ surrounding ground	None/none
Buccaneer Ridge Apts. 42429	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/71	NA	UK	Radial/ surrounding ground	None/none
105 Married Student Apartments T-U 37628	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
105 Married Student Apartments T-U 37630	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
105 Married Student Apartments T-U 37629	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
106 Married Student Apartments T-U 37785	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
106 Married Student Apartments T-U 37936	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	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
106 Married Student Apartments T-U 37932	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/100	NA	UK	Radial/ surrounding ground	None/none
Thomas Stadium 50422	Transformer	Steel/NA	NA/NA	Visual observation	Mineral Oil/202	NA	UK	Radial/ surrounding ground	None/none
Gray Fossil Site	Transformer	Steel/NA	NA/NA	Visual Observation	Mineral Oil/331	NA	UK	Radial/ surrounding ground	None/none
Underground Storage Tanks (USTs)									
College of Medicine Building #178 Generator  	UST	Fiberglass/ Fiberglass	N/N	Locked fill port, automatic tank gauging, visual observation during transfer	Diesel/6,000	NA	1999	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
College of Medicine Building #119 Generator 54454 (exempt) 	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
Physical Plant (exempt) 2337 	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

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
Physical Plant (exempt) 2338 	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
Main Campus Culp University Center Generator 2378 (exempt) 	UST	Fiberglass/ Flexible Plastic	Y/N	Locked access fill port, visual observation transfer	Diesel/560	NA	1999	Radial to surrounding ground/ Groundwater	NA

Notes:
AST = aboveground storage tank
Apts. = apartments
gal = gallons
N = no
NA = not applicable
VA = Veterans Affairs
Y = yes

[1] Numbered 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 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 USTs, drums and totes, and leakage or explosion for transformers).

Additionally, Table 3-1 establishes a direction of flow from the storage structure to the outfalls, should the secondary containment device (if present) hypothetically fail or be insufficient to handle the release. The estimated capacity of the secondary containment device is also included. The secondary containment capacity estimates are based on rough field measurements and/or information provided by facility personnel. (Note: drums and tanks stored inside the facility are exempt from listing the flow direction in the event of a spill since the oil will be contained within the facility.)

Section 14.0 describes secondary containment considerations.

Figures 2-8 in Appendix A show the facility layouts and projected drainage.

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 14.2, 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 is 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 4.0 and 16.0.

ETSU relies on its inspection and maintenance program, as well as spill response activities, for managing its transformers and small diameter piping and 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] 30-2012, 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) 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.
(6) Draining water from diked areas shall be controlled to prevent liquids from entering natural water resources, public sewers, or public drains.

Industry Standard Consideration

Secondary Containment Tanks (NFPA 30-2012, Section 22.11.4)

(1) Tank capacity should not exceed 20,000 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 30-2012.

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). In the 2002 rule clarification, as detailed in Section 1.3, it is not required that facilities demonstrate impracticality for containment of spills from oil-filled operational equipment, 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 EHS Manager or designee is responsible for conducting the inspections and completing and signing the appropriate forms. Section 14.6 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
Secondary Containment or Drainage Control Area Drainage				
Operational (Routine)	Within 7 days of rainfall event	EHS Manager or Designee	Appendix B	3 years
Shop-Fabricated Aboveground Storage Tanks[3]				
External Visual (Routine)	Monthly and annually Per STI SP001-05	EHS Manager or Designee	Appendix B	3 years
Aboveground Piping				
External Visual (Routine)	Monthly and annually	EHS Manager or Designee	Appendix B	3 years
Portable/Mobile Containers (e.g., Drums, Totes)				
External Visual (Routine)	Monthly Per STI SP001-05	EHS Manager or Designee	Appendix B	3 years
Oil-Filled Operational Equipment (Including Transformers)				
External Visual (Routine)	Annually	EHS Manager or Designee	Appendix B	3 years
Spill Kits				
Check inventory to ensure adequate supply	Monthly	EHS 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 (SP001-05) inspection requirements. Shop-fabricated tanks that are considered consumptive-use tanks (i.e., end-point tanks typically).

NA = Not Applicable
SP001-05 = Standard for the Inspection of Aboveground Storage Tanks
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 SP001-05 (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 SP001-05, 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	EHS 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 SP001-05	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 SP001-05 (steel) inspection requirements.

ASTs = Aboveground Storage Tanks
IAW = In accordance with
NA = Not applicable
SP001-05 = Standard for the Inspection of Aboveground Storage Tanks, Version 5
STI = Steel Tank Institute
SP031 = Standard for Repair of Shop Fabricated Aboveground Tanks (4th Edition)

With the exception of the 20,000-gallon diesel tank, all of the other 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 Aboveground Storage Tanks (SP001-05), periodic (monthly and annual) visual inspections by authorized ETSU personnel are the only type of integrity testing required for Category 1 systems under 5,000-gallons in capacity. 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 test is due in 2018. 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 EHS Manager or designee is required to regularly inspect all containers. These inspections should include observing oil tanks, drum and 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 Environmental Health and Safety 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 EHS Manager provides prevention, awareness, and response spill training to all new employees involved with oil equipment operation, maintenance, or oversight. Annual refresher training is completed as well. 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.

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

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, handouts, 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.

Example 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 EHS 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 in order 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. The 20,000-gallon AST at the Power Plant is in a fenced/locked area. 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 the Physical Plant 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 of time, 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 facility 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.

With the exception of 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 tanks. Before filling the tanks, 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 any diked areas; 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 EHS Manager or designated personnel must be notified and present to unlock fill ports and supervise the loading procedure. Other virgin oil products are delivered in 55-gallon drums or 270- to 330-gallon totes by box trailer. Diesel fuels for the emergency generators are delivered on an as needed basis. Used oil is stored in a tote at the Physical Plant. For transport to offsite recycling, a contractor transfers the oil from the drums 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 of the 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 30-2012) 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 30-2012 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 14.2, 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 blocks on the tank trucks to prevent movement.

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*.

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 USTs 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 16.2.

In addition, Tennessee Rules 0400-18-01-.05(4) and 68-215-127 require spills of 25 gallons or more to the environment[1] to be reported to the Tennessee Department of Environment and Conservation (TDEC). See Section 16.0 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 30-2012 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 16.3.2 of this Plan.

13.0 DRAINAGE CONTROL

13.1 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.

13.2 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 valve 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.

13.3 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).

13.4 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 Campuses through a series of sheet flow to drainage ditches and catch basins to unnamed tributaries through and adjacent to campus to Brush Creek and Sinking Creek. Storm water from Valleybrook generally flows east to an unnamed tributary to Kendrick Creek. Storm water from the Gray Fossil Site travels approximately 200 feet to Ford Creek.

If a spill should occur on the property that could not be contained onsite with spill materials including absorbents, pads, and socks, the EHS 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. Facility storm water drainage and drainage from undiked areas is discussed in Sections 2.4 and 13.3, respectively.

13.5 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*.

14.0 BULK STORAGE CONTAINERS/SECONDARY CONTAINMENT

14.1 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 30-2012 Flammable and Combustible Liquids Code). Reference Table 3-1 for container content/capacity, container material, and good engineering (e.g., liquid level gauges). All of these oil storage containers are designed to operate under ambient atmospheric conditions for pressure and temperature.

14.2 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. With the exception of the used cooking oil container, all oil storage containers 55 gallons and greater must have adequate secondary containment. Containers and equipment are located in storage locations with adequate secondary containment.

14.3 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 to discharge rainwater; therefore, this section is *not applicable.*

14.4 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*.

14.5 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 partially buried metallic tanks at the facility; therefore, this section is *not applicable*.

14.6 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 SP001-05) 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, with the exception of the diesel generator.

All of the 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 maintained by the EHS 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

14.6.1 Shop-Fabricated Containers up to 5,000 gallons

With the exception of those noted in 14.6.2, the oil storage containers at the facility are classified as STI SP001-05 "Category 1" systems that are less than 5,000 gallons. In accordance with Table 5.5 of STI SP001-05, 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.

14.6.2 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 SP001-05, a formal external inspection by a certified STI inspector is required every 20 years for these tanks. In addition, periodic (monthly and annual) visual inspections are required for these tanks. Section 10.2.4 of STI SP001-05 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 10.2 of STI SP001-05 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 of STI SP001-05 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 SP001-05 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 Re-commissioning

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.

14.6.3 Record Maintenance

Inspections must be documented and records maintained for at least 3 years by the EHS Manager 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.

14.7 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.*

14.8 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 facility (i.e. 1,000-gallon E-85 tank and ASTs located at generators) have a visual gauge (e.g., float, pop-up, dial, or clock gauges). Oil filled operational equipment 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 30-2012.

14.9 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*.

14.10 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 example forms in Appendix B. Additionally, operational personnel will be trained and instructed to notify a supervisor and the ETSU EHS Manager if these conditions are observed. The ETSU EHS 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.

14.11 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 drum and tote oil storage containers that are in use at ETSU and also lists the general means and adequacy of containment.

The 55-gallon drums of petroleum-based liquids (hydraulic fluid, lubricant oil, etc.) are inside the buildings, on spill pallets providing secondary containment. All storage locations have concrete floors. Spill response materials are located nearby.

15.0 FACILITY TRANSFER OPERATIONS, PIPING, AND PUMPING

15.1 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 underground storage tanks 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.

15.2 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*.

15.3 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 ASTs; therefore, this section is *not applicable*.

15.4 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 7.0 indicates requirements for routine and periodic inspections of aboveground piping. Routine inspections of valves, piping, hoses, and appurtenances can be inspected using the piping inspection form in Appendix B to look for leaks, misalignment, vibration, supports, corrosion, and miscellaneous items. Operational personnel are trained and instructed to notify the SPCC contacts listed in Section 2.2 any time leaks or signs of deterioration are observed.

15.5 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.

The rigid aboveground piping associated with the 560-gallon AST to the Mini Dome generator and the 550-gallon Brooks Gym generator is not located behind bollards or protected from vehicular traffic. 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.

16.0 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.

16.1 Spill Control Equipment and Materials

ETSU has adequate discharge response capability, equipment, and personnel to contain any discharge. ETSU provides spill response equipment in several locations within and around the facility, 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
- Front end loader
- 55-gallon drums
- Two-way radios
- Cellular phones

All members of the Spill Response Team, as well as other authorized ETSU personnel, are provided two-way radios for internal communications. In-plant telephone lines and cellular phones are also available for facility 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.

Example emergency action checklists and spill notification forms are included in Appendix D.

16.2 Discharge Notifications

The fuel or oil transfer process must be monitored by a trained representative of the facility. In the event of a spill during fuel or oil transfer, the procedure in Section 16.3 will be followed. When reporting a spill, include the information in the Response Notification Form in Appendix D.

Table 16-1
Emergency Notification Phone List

Prioritized Contact List	Response Role	Day Phone	24 Hour Phone
EHS Manager	Facility Qualified Individual Incident Command and Control	(423) 439-6029	(423) 202-1237
EHS Director	Alternate Facility Qualified Individual Assist with Incident command and control	(423) 439-4081	(423) 483-3862
Facility Maintenance (24/7)	Provide equipment and personnel	(423) 439-7900	(423) 439-7900
ETSU Public Safety Office (24/7)	Traffic Control Evacuation Crowd Control	(423) 439-4480	(423) 439-4480
Tennessee Emergency Management Agency	Incident Reporting, RQ Spill, notifies of federal and state agencies	(800) 262-3300	(800) 262-3300
Washington County Emergency Management Agency	Incident Reporting, RQ Spill	(423) 434-6081	(423) 434-6081
National Response Center	Receiver of all reports of spills to water s of the US, or potential to affect waters.	(800) 424-8802	(800) 424-8802
Johnson City Fire Department	Emergency Medical Fire suppression support	911 (423) 975-2840	911 (423) 975-2840
Washington County Sheriff's Department	Traffic Control Evacuation Crowd Control	911 (423) 788-1414	911 (423) 788-1414
Johnson City Police Department	Traffic Control Evacuation Crowd Control	911 (423) 434-6160	911 (423) 434-6160
Hospital Johnson City Medical Center 400 N. State of Franklin Road Johnson City, TN 37604-6094	Medical Support	(423) 431-6111	(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
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-hr)	Spill prevention or spill response information	(404) 562-8700	(404) 562-8700
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

Notes:
NPDES = National Pollutant Discharge Elimination System
RQ = reportable quantity
U.S. EPA = U.S. Environmental Protection Agency

16.3 Spill Response Procedures

A prompt and adequate response to any spill of petroleum at the ETSU facility is mandatory. Regardless of the size or scope of the spill, all releases should be reported to the EHS 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 Plan.

16.3.1 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 16-1 — Emergency Notification Phone List. Report location of occurrence, type of occurrence, and if it involves injuries.

16.3.2 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 U.S.
        - The 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 16-1, Emergency Notification Phone List, 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 17.

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 EHS 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 EHS Manager will inspect the area post-cleanup to verify that efforts were sufficient and that waste was properly packed for offsite disposal.

In the event of a large oil/hazardous materials release, the EHS Manager should be contacted immediately. Large spill cleanup may be handled by a third-party emergency response contractor as coordinated by the spill consultant. Contact information is in Table 16-1.

If a large spill occurs, efforts should be made to prevent oil/hazardous materials from reaching storm drains and outfalls. While these efforts are underway, the EHS 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 EHS Manager.
- The Director of Operations or the Safety Officer 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.

17.0 WRITTEN SPILL REPORT GUIDELINES

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

17.1 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 U.S. 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 Department of Environment and Conservation
Division of Water Resources
Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, Tennessee 37601
(423) 854-5400

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.

17.2 State Agency Report

ETSU is required to report any spill event or 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

17.3 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 e-mail to Laura.Waynick@tn.gov or via mail to following address:

Laura Waynick, Environmental Compliance Manager
Department of General Services
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243

Appendix A
Facility Diagrams

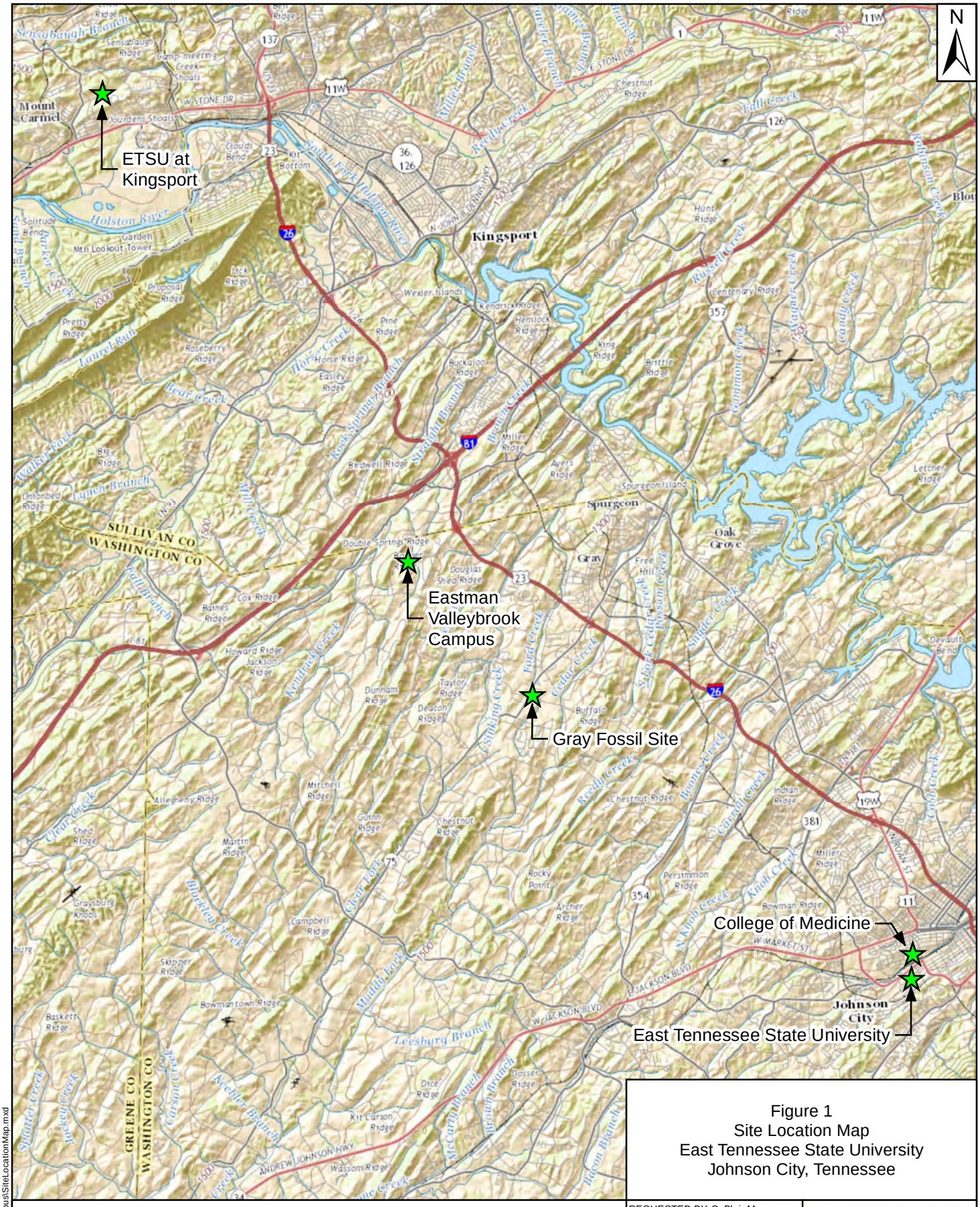


Figure 1
Site Location Map
East Tennessee State University
Johnson City, Tennessee

REQUESTED BY:	C. Blair-Myers
DRAWN BY:	N. Rinehart
DATE:	6/1/2016
PROJECT NO:	0888813060
PITTS NO:	TB.166.005

TN Department of General Services

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X:\DGS\ETSU_Campus\SiteLocationMap.mxd

Service Layer Credits: USGS Church Hill, Kingsport, Indian Springs, Lovelace, Sullivan Gardens, Boone Dam, Bluff City, Jearoldstown, Leesburg, Jonesboro, and Johnson City Topo Quad; USGS The National Map: National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; U.S. Census Bureau - TIGER/Line; HERE Road Data

ETSU Building Index

2 Alexander Hall
3 D.M. Brown Hall
4 Alexander Hall - Modular Classroom
5 Mathes Hall
6 Ernest C. Ball Hall
7 Memorial Center (Mini-Dome)
7A Gentry Field
7B Walker Track
8 Warf-Pickel Hall
9 Memorial Hall
10 Gilbreath Hall
11 Campus Center Building
12 Sam Wilson Hall
14 Burleson Hall
15 Lyle House
16 Earnest House
17 Wilson-Wallis Hall
18 Hutcheson Hall
19 John P. Lamb, Jr. Hall
20 Roy S. Nicks Hall
21 Rogers-Stout Hall
25 Green House
40 Power Plant
41 Clack Building
42 Bond Building
44 Equipment Shed Building
45 Storage Building
60 Burgin-Dossett Administration Hall
62 Art Annex
68 Information and Public Safety Building
90 920 West Maple St.
91 Reece Museum
92 D.P. Culp University Center
94 Betty Basler Field - Softball Stadium
95 Summers-Taylor Soccer Complex
96 902 West Maple St.
100 Buc-Ridge Security Building
101 Disc Golf Course
102 University Woods Pavilion
103 University Woods
104 Parking Garage
105-106 Married Student Apartments T-U
107 Wash House
110-112 Davis Apartments
124 Yellow Bike Shed
125 Veterans Dwarf Conifer Gardens
127 Carter Hall
128 Stone Hall
129 Yoakley Hall
130 Powell Hall
131 Ross Hall
132 West Hall
133 Nell Dossett Residence Hall
134 Lucille Clement Hall
140 Luntsford Apartments
150 Center for Community Outreach and Family Services
151 Office of Rural and Community Health
153 908 West Maple St.
155 916 West Maple St.
156 914 West Maple St.
157 918 West Maple St.
158 1110 Seminole Dr.
159 1118 Seminole Dr.
170 Physical Plant Storage Building
200 Recycling Center
303 Information Technology/ Telecommunications
304 Johnson City Family Practice
305 Central Receiving and Physical Plant Warehouse
306 WETS-FM Radio Station
307 Veterans Memorial
310 Harry D. Powell Observatory
320 Charles C. Sherrod Library
321-331,351,352 Buccaneer Ridge
330 Basler Center for Physical Activity
332 Child Study Center
340 Auxiliary Food Service
349 Golf Maintenance Building
350 Warren-Greene Golf Center
353 Governors Hall
355 Surplus Warehouse
356 Johnson City Family Practice - Modular Office
358 Centennial Hall
470 ETSU Thomas Baseball Stadium
513 Intramural Fields
515 Amphitheater
516 ETSU Campus Quad
517 Water Tower
519 Outdoor Track
520 ETSU Dave Mullins Tennis Complex
537 Bike Course
539 Basler Challenge Course
557 Carillon
904 Scott M. Niswonger Digital Media Center

Physical Plant
15,000-Gallon Gasoline UST (Exempt)
4,000-Gallon Diesel UST (Exempt)
1,000-Gallon E-85 AST
E-85 Dispenser
Gasoline Dispenser
Diesel Dispenser
Shed
Storm Drain
Storm Water Trench (Concrete)
Overhang
Dispenser Island
275-Gallon Used Oil Poly Tank
Garage Doors
Garage
Spill Pallets
6 - 5-Gallon Drums of Motor Oil
Warehouse
2 - Drums of New Product Oil
8 - 55-Gallon Drums of Motor Oil and Transmission Oil
0 17.5 35 70 Feet

298-Gallon Diesel Generator
560-Gallon Diesel AST
UK-55-Gallon Elevator Reservoirs
750-Gallon Diesel Generator
UK>55-Gallon Elevator Reservoirs
400-Gallon Diesel Generator
80-Gallon Diesel Generator
55-Gallon Diesel Generator
200-Gallon Diesel Generator
550-Gallon Diesel AST
700-Gallon Diesel Generator
UK >55 Gallon Elevator Reservoirs
200-Gallon Used Cooking Oil AST
300-Gallon Diesel Generator
560-Gallon Diesel UST (Exempt)
UK>55-Gallon Elevator Reservoirs
250-Gallon Diesel Generator
20,000-Gallon Diesel AST
UK>55-Gallon Elevator Reservoirs
785-Gallon Diesel Generator
UK>55-Gallon Elevator Reservoirs
0 125 250 500 750 1,000 1,250 Feet

Lamont St, Highland Ave, Lee St, Taylor St, Love St, Sunset, N Lee Cir, Lee Cir, S Lee Cir, 1st St, 2nd St, Magnolia Ave, State of Franklin Rd, Boyd St, Lynn St, University Pkwy, Security Ln, W State of Franklin Rd, W Walnut St, W Maple St, Pine Maple, W Pine St, W Locust St, Cherokee St, Millennium Pl, Harris Dr W, State Rte 381, W Lake St, Alexander Dr, Stout Dr, Southwest Ave, Cedar Pl, Cherokee, US Hwy 321, State Rte 381, 3 Oak Dr, 4 Oak Dr, Lake, Brownlow, Brownlow Cir, Lake Dr W, Lake Dr E, Greenwood Dr, Mary St, Leonard St, Lyle St, Litle Ct, Jack Vest Dr, Tyner St, John Robert Bell Dr, Ross Dr, Sherrod Lane St, Campus Dr, University Dr, N Dossett, S Dossett Dr, Dossett Dr, J L Seehorn Jr Rd, Village Ln, Pirates Cove Rd, Pepper Ln, Buccaneer Rd, Buccaneer Ridge Dr, Field, Signal Dr, Wyndale Rd, N Greenwood Dr, S Greenwood Dr, Leeland Rd, Leeland Dr, Boundary Dr, Seminole Dr, College Heights Rd, Narrow Ln, Galen Dr, Cain Dr

Legend
Flow Direction
Aboveground Storage Tank (AST)
Underground Storage Tank (UST)
Diesel Generator
Fuel Dispenser
Hydraulic Elevator
Storage Drum
Storm Drain
Transformer

N W E S

JOB NO.	0888813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
DATE:	8/4/2016
REVIEWED BY:	G. POPE
SCALE:	1 " = 250 '

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FIGURE 2
SPCC FACILITY LAYOUT

MAIN CAMPUS
EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE

Data Sources: Google Earth Pro Imagery - Dated 10/142015

X:\DGS\ETSU_Campus\SiteMap_Main_Campus.mxd

ETSU Building Index

2 Alexander Hall
3 D.M. Brown Hall
4 Alexander Hall - Modular Classroom
5 Mathes Hall
6 Ernest C. Ball Hall
7 Memorial Center (Mini-Dome)
7A Gentry Field
7B Walker Track
8 Warf-Pickel Hall
9 Memorial Hall
10 Gilbreath Hall
11 Campus Center Building
12 Sam Wilson Hall
14 Burleson Hall
15 Lyle House
16 Earnest House
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96 902 West Maple St.
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101 Disc Golf Course
102 University Woods Pavilion
103 University Woods
104 Parking Garage
105-106 Married Student Apartments T-U
107 Wash House
110-112 Davis Apartments
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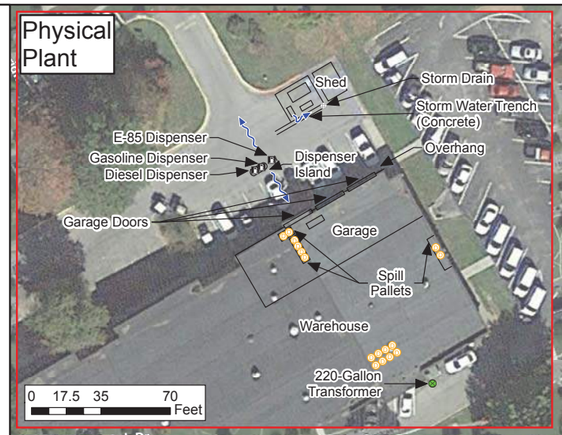
516 ETSU Campus Quad
517 Water Tower
519 Outdoor Track
520 ETSU Dave Mullins Tennis Complex
537 Bike Course
539 Basler Challenge Course
557 Carillon
904 Scott M. Niswonger Digital Media Center



Legend

- Flow Direction
- Aboveground Storage Tank (AST)
- Underground Storage Tank (UST)
- Diesel Generator
- Fuel Dispenser
- Hydraulic Elevator
- Storage Drum
- Storm Drain
- Transformer

JOB NO.	0888813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
DATE:	8/3/2016
REVIEWED BY:	G. POPE
SCALE:	1 " = 250 '

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FIGURE 3
SPCC FACILITY LAYOUT

MAIN CAMPUS - TRANSFORMERS
EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE

Data Sources: Google Earth Pro Imagery - Dated 10/142015

X:\DOS\ETSU_Campus\SiteMap_Main_Campus_Transformers.mxd

JOB NO.	0888813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
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REVIEWED BY:	G. POPE
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FIGURE 4
SPCC FACILITY LAYOUT

COLLEGE OF MEDICINE
EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE

Generator
6,000-Gallon Diesel UST
UK>55-Gallon Elevator Reservoirs
217-Gallon Diesel Transformer
710-Gallon Diesel Generator
UK>55-Gallon Elevator Reservoir
4,000-Gallon Diesel UST (Exempt)
300-Gallon Diesel Generator
UK>55-Gallon Elevator Reservoirs
1,000-Gallon Diesel Generator

College of Medicine Building Index

1	Carl A. Jones Hall - College of Medicine
2	Ed Allen Hall
3	V.A. Offices
4	Medical School Library
5	V.A. Research
6	William L. Jenkins Forensics Center
7	Pharmacy School
8	Aud./Sph., Amm. Svs./Fiscal
13	V.A. Chapel
15	V.A. Hospital Guest House
16	V.A. Single Quarters
17	V.A. Carnegie Library (leased)
19	V.A. Directors Housing
20	V.A. Human Resource Mgt.
34	Museum/V.A. Offices and Shops
35	V.A. Memorial Hall Theater (leased)
36	V.A. Morgue
37	V.A. Medical Center Psychiatry
39	V.A. Duplex Quarters
40	V.A. Resident Engineers
41	V.A. Eng. Admin. Office
42	V.A. Eng. Planning/Design
43	V.A. Offices
44	V.A. Single Quarters
45	V.A. Single Quarters
46	V.A. Single Quarters
47	V.A. Single Quarters
52	McWherter Hall - College of Medicine
53	U.S. Post Office
60	Building 60
69	V.A. Hospital Support Building
77	V.A. Clinical Support Building
108	V.A. Eng. Boiler Plant/Incinerator
116	V.A. Emer. Gen. Building
117	V.A. National Cemetery Administration
119	College of Medicine
120	Emergency Generator Building
160	V.A. Domiciliary/Primary Care
162	V.A. NHCU
178	Stanton-Gerber Hall
200	V.A. Hospital
201	V.A. Eng. Maintenance
204	V.A. Out-Patient Clinic/ER
205	V.A. Laundry/Warehouse
208	V.A. ESG Co-Gen Energy Center
210	V.A. Building 212 - College of Medicine Student Center
554	Johnson City Community Health Center

Legend

- Abovegound Storage Tank (AST)
- Underground Storage Tank (UST)
- Diesel Generator
- Hydraulic Elevator
- Flow Direction

0 200 400 800 1,200 1,600 2,000 Feet

Basemap Source: Google Earth Pro Imagery - Dated 10/14/2015

X:\DOS\ETSU_Campus\SiteMap_VA_Campus.mxd

JOB NO.	0888813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
DATE:	5/17/2016
REVIEWED BY:	G. POPE
SCALE:	1 " = 200 '

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FIGURE 5
SPCC FACILITY LAYOUT

COLLEGE OF MEDICINE TRANSFORMERS
EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE

480-Gallon Tansformer

344-Gallon Tansformer

259-Gallon Transformer

240-Gallon Transformer

2 - 180-Gallon Transformers

College of Medicine Building Index

1	Carl A. Jones Hall - College of Medicine
2	Ed Allen Hall
3	V.A. Offices
4	Medical School Library
5	V.A. Research
6	William L. Jenkins Forensics Center
7	Pharmacy School
8	Aud./Sph., Amm. Svs./Fiscal
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42	V.A. Eng. Planning/Design
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108	V.A. Eng. Boiler Plant/Incinerator
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120	Emergency Generator Building
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162	V.A. NHCU
178	Stanton-Gerber Hall
200	V.A. Hospital
201	V.A. Eng. Maintenance
204	V.A. Out-Patient Clinic/ER
205	V.A. Laundry/Warehouse
208	V.A. ESG Co-Gen Energy Center
210	V.A. Building 212 - College of Medicine Student Center
554	Johnson City Community Health Center

Legend

- Aboveground Storage Tank (AST)
- Underground Storage Tank (UST)
- Diesel Generator
- Hydraulic Elevator
- Transformer
- Flow Direction

0 200 400 800 1,200 1,600 2,000 Feet

Basemap Source: Google Earth Pro Imagery - Dated 10/14/2015

X:\DOS\ETSU_Campus\SiteMap_VA_Campus_Transformers.mxd

JOB NO.	0888813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
DATE:	5/17/2016
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SCALE:	1 " = 60 '

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FIGURE 6
SPCC FACILITY LAYOUT

EASTMAN VALLEYBROOK CAMPUS
EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE

X:\DGS\ETSU_Campus\SiteMap_ValleyBrook.mxd

Basemap Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

- Diesel Generator
- Hydraulic Elevator
- Transformer
- Flow Direction
- Fence

X:\DOS\ETSU_Campus\SiteMap_GrayFossilSite.mxd

JOB NO.	0888813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
DATE:	5/17/2016
REVIEWED BY:	G. POPE
SCALE:	1 " = 50 '

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FIGURE 7
SPCC FACILITY LAYOUT

GRAY FOSSIL SITE
EAST TENNESSEE STATE UNIVERSITY
1276 GILBREATH DRIVE
JOHNSON CITY, TENNESSEE

Basemap Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

X:\DGS\ETSU_Campus\SiteMap_Kingsport.mxd

Basemap Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

FIGURE 8
SPCC FACILITY LAYOUT

EAST TENNESSEE STATE UNIVERSITY AT KINGSPORT
1501 UNIVERSITY BOULEVARD
KINGSPORT, TENNESSEE

ETSU
East Tennessee State University

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JOB NO.	088813060
PITTS NO.	TB.166.005
DRAWN BY:	N. RINEHART
DATE:	6/3/2016
REVIEWED BY:	G. POPE
SCALE:	1" = 40'

Appendix B
Example Inspection Forms

SHOP-FABRICATED AST, GENERATOR, PAD-MOUNTED TRANSFORMER, HYDRAULIC RESERVOIR, AND USED COOKING OIL CONTAINER INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of shop-fabricated ASTs (i.e., typically consumptive-use tanks), diesel fueled electrical generators, pad-mounted electrical transformers, and used cooking oil containers. Notify the EHS Manager, immediately if any significant deficiencies are identified.

Industry Standard Consideration: STI SP001-05 (for shop-fabricated ASTs) and IEEE 62 (for transformers)

Frequency: Other than pad-mounted transformers – monthly; pad-mounted transformers – annually

Tank/Container, Date: _____ Inspector: _____

	YES	NO	NA	CAR	Comments
STRUCTURAL INTEGRITY					
Visible signs of leakage from tank?	☐	☐	☐	☐	
Surface free of leaks?	☐	☐	☐	☐	
Valves and gaskets free of leaks?	☐	☐	☐	☐	
Condition sound (no corrosion, pitting, distortions)?	☐	☐	☐	☐	
Bolts, rivets, welds, and seams intact/sound?	☐	☐	☐	☐	
Supports and foundation intact/sound?	☐	☐	☐	☐	
Tank drains closed?	☐	☐	☐	☐	
Level gauges and alarms working?	☐	☐	☐	☐	
Vents unobstructed and clean?	☐	☐	☐	☐	
Presence of water in primary tank?	☐	☐	☐	☐	
Grounding system functional?	☐	☐	☐	☐	
Cathodic protection system functional?	☐	☐	☐	☐	
ATTACHED PIPING					
Surface free of leaks?	☐	☐	☐	☐	
Valves and fittings free of leaks?	☐	☐	☐	☐	
Piping adequately supported?	☐	☐	☐	☐	
Pipes and supports free of corrosion?	☐	☐	☐	☐	
Buried pipes exposed?	☐	☐	☐	☐	
Out-of-service pipes capped?	☐	☐	☐	☐	
Signs/barriers present near aboveground piping?	☐	☐	☐	☐	
Localized cover/vegetation free of stain/distress?	☐	☐	☐	☐	
SECONDARY CONTAINMENT					
Drainage valves closed and locked?	☐	☐	☐	☐	
Drainage valves free of leaks?	☐	☐	☐	☐	
Containment area free of drainable water?	☐	☐	☐	☐	
Standing water free of product/sheen?	☐	☐	☐	☐	
Debris absent?	☐	☐	☐	☐	
Containment structure intact/sound?	☐	☐	☐	☐	
Water able to drain away from tank?	☐	☐	☐	☐	
Presence of water/fuel in interstice (DW AST?)	☐	☐	☐	☐	
Interstice leak detection operable (DW AST?)	☐	☐	☐	☐	
SECURITY					
Unit locked?	☐	☐	☐	☐	
Gates/fences intact/sound?	☐	☐	☐	☐	
Gates/fences locked?	☐	☐	☐	☐	
Starter controls locked?	☐	☐	☐	☐	
Lighting adequate?	☐	☐	☐	☐	

Notes:

AST	Aboveground Storage Tank	NA	Not Applicable
CAR	Corrective Action Required	STI	Steel Tank Institute
DW	Double-Walled		
IEEE	Institute of Electrical and Electronics Engineers		

OIL WATER SEPARATOR/SUMP INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of oil-water separators (OWSs) and sumps. Notify EHS Manager or designee immediately if any significant deficiencies are identified.

Industry Standard Consideration: Maintain IAW manufacturer's specifications

Frequency: As specified below

Location: _____ Inspector: _____
(Print Name)

Date: _____ Inspector: _____
(Signature)

	SAT	UNSAT	NA	CAR	Comments
WEEKLY INSPECTION					
OWS/Grease Trap Functioning	☐	☐	☐	☐	_____
Presence of Free Product[1]	☐	☐	☐	☐	_____
Presence of Sheen[1]	☐	☐	☐	☐	_____
Presence of Fuel Odor[1]	☐	☐	☐	☐	_____
Coalescer Inspection for Fouling	☐	☐	☐	☐	_____
Operation of Pump, Valve, Skimmer, etc.	☐	☐	☐	☐	_____
MONTHLY INSPECTION					
Leaks from Separator or Appurtenances	☐	☐	☐	☐	_____
Operation of Pumps	☐	☐	☐	☐	_____
Determination of Solids Level	☐	☐	☐	☐	_____
OWS/Grease Trap Free of Blockage	☐	☐	☐	☐	_____
Up/Down Stream Free of Blockage	☐	☐	☐	☐	_____
SEMI-ANNUAL INSPECTION					
Determination of Oil/Grease Level	☐	☐	☐	☐	_____
AS REQUIRED					
Inspection/Cleaning of Internal Chambers	☐	☐	☐	☐	_____

Notes:

1 = inspect OWS/grease trap/sump and effluent
CAR = corrective action required
IAW = in accordance with
NA = not applicable
OWS = oil water separator
SAT = satisfactory
UNSAT = unsatisfactory

LOG FOR DRAINAGE OF DIKE BASINS/SECONDARY CONTAINMENT

Instructions: This log must be completed each time storm water is discharged from secondary containment. The storm water shall not be discharged without treatment if it has a visible sheen. Furthermore, any product in the secondary containment structure must be removed. Notify the EHS Manager or designee immediately if any significant deficiencies are identified.

Industry Standard Consideration: NFPA 30-2012

Frequency: After each significant rain event

Date Of Draining Operation	Time Site Was Drained	Description Of Tank/ Vault/ Secondary Containment Site	Name Of Individual Inspecting Water Before Draining	Presence Of Sheen (X)		Signature Of Individual Draining Containment Site
				YES	NO	

Notes:

1 = product or sheen

NFPA = National Fire Protection Association

SPILL KIT CHECKLIST

Instructions: Complete routine external visual inspection of spill kits. Notify EHS Manager immediately if any significant deficiencies are identified.

Industry Standard: Facility operating procedures

Frequency: Monthly

Location: ______________________ Inspector: ______________________

Date: ______________________

SPILL RESPONSE	YES	NO	NA	CAR	Comments
Spill response materials near sources?	☐	☐	☐	☐	________________
Spill response materials adequate?	☐	☐	☐	☐	________________
Emergency telephone number/contact posted?	☐	☐	☐	☐	________________
Personal protective equipment in kit?	☐	☐	☐	☐	________________

Location: ______________________ Inspector: ______________________

Date: ______________________

SPILL RESPONSE	YES	NO	NA	CAR	Comments
Spill response materials near sources?	☐	☐	☐	☐	________________
Spill response materials adequate?	☐	☐	☐	☐	________________
Emergency telephone number/contact posted?	☐	☐	☐	☐	________________
Personal protective equipment in kit?	☐	☐	☐	☐	________________

Location: ______________________ Inspector: ______________________

Date: ______________________

SPILL RESPONSE	YES	NO	NA	CAR	Comments
Spill response materials near sources?	☐	☐	☐	☐	________________
Spill response materials adequate?	☐	☐	☐	☐	________________
Emergency telephone number/contact posted?	☐	☐	☐	☐	________________
Personal protective equipment in kit?	☐	☐	☐	☐	________________

Notes:

CAR = corrective action required
NA = not applicable
POC = point of contact

TANK TRUCK FUEL LOADING/UNLOADING INSPECTION CHECKLIST

Instructions: Complete routine external visual inspection of truck loading/unloading areas. Notify EHS Manager or designee immediately if any significant deficiencies are identified.

Industry Standard Consideration: API 2610

Frequency: As needed

Location: _____ Inspector: _____
(Print Name)

Date: _____ Inspector: _____
(Signature)

	SAT	UNSAT	NA	CAR	Comments
HOSES, PIPES, AND VALVES					
Leaks	☐	☐	☐	☐	_____
Operation	☐	☐	☐	☐	_____
Deterioration	☐	☐	☐	☐	_____
Clamps and Supports	☐	☐	☐	☐	_____
STRUCTURE					
Bolts, Clamps, and Supports	☐	☐	☐	☐	_____
Roofing and Ladders	☐	☐	☐	☐	_____
GENERAL					
Electrical Ground	☐	☐	☐	☐	_____
Portable Equipment Stowed	☐	☐	☐	☐	_____
Secondary Containment Structure	☐	☐	☐	☐	_____
Instruction/Warning Signage	☐	☐	☐	☐	_____
Traffic Control Devices	☐	☐	☐	☐	_____
Dispenser Labeling	☐	☐	☐	☐	_____
Security Lighting	☐	☐	☐	☐	_____
CONTROL DEVICES					
Early Departure Warning Device	☐	☐	☐	☐	_____
Starter Control	☐	☐	☐	☐	_____
Scully System	☐	☐	☐	☐	_____
Dead-Man Controls	☐	☐	☐	☐	_____
Pumps	☐	☐	☐	☐	_____
SECONDARY CONTAINMENT					
Drain Inlets Protected	☐	☐	☐	☐	_____
Spill response material on hand	☐	☐	☐	☐	_____
Oil Stains/Sheen	☐	☐	☐	☐	_____

Notes:

API = American Petroleum Institute
CAR = corrective action required
NA = not applicable
SAT = satisfactory
UNSAT = unsatisfactory

b. Contractor agrees to monthly and systematically examine, clean, lubricate and adjust the elevator equipment and document all activities on the State approved maintenance form (Attachment 4, Monthly Inspection Check List). All tasks identified in Attachment 4 shall be included under the monthly maintenance fee and the Contractor shall provide unlimited callback service, as conditions warrant, and in the judgment of the State, repair or replace all portions of the equipment included under this contract, including but not limited to the following:

(1) Elevator machines, including worms, gears, thrust bearings, drive sheaves, drive sheave shaft bearings, brake pulleys, brake coils, brake contacts, linings and all other components and parts of the machine and brake.
(2) Hoist motors, motor generator sets and solid state motor drives, including commutators, brushes, brush holders, bearings, and all other components and parts.
(3) Motor windings shall be treated as needed with proper insulating compound which has been approved by the motor manufacturer.
(4) Hydraulic plungers, packing, pump motors, pumps, belts, pulleys, valves, mufflers, piping and connections (except those beneath the ground), silencers, tanks or oil reservoirs hydraulic system oil and all other related components and parts.
(5) Controllers, selectors, selector tapes and dispatching equipment, including all relays, solid state components, encoders, and software.
(6) Resistors, condensers, transformers, contacts, leads, dashpots, timing devices, computers, electrical driving equipment, and all other components and parts.
(7) Governors, including governor sheave and shaft assemblies, bearings, contacts and governor jaws, car and counterweight safeties and buffers.
(8) Deflector or secondary sheaves including bearings, car and counterweight buffers, car and counterweight guide rails, top and bottom limit switches, slowdown and position switches, governor tension sheave assembly, compensating sheave assembly, counterweight guide shoes including rollers or gibs, inductors, cams and tapes.
(9) Hoistway door interlocks, hoistway door hangers, bottom door guides and auxiliary door closing devices.
(10) Automatic power operated door operators, including door drive chains, sheaves, belts, car door hangers, car door contacts, door protective devices, load weighing equipment, car frames, car safety mechanism, platforms, elevator car roller guides and roller guide assemblies.
(11) Alarm bells, emergency stop switches, emergency car lights and batteries.
(12) Car and corridor operating stations, car fan or exhaust blower, car and corridor signals and fixtures including lights, dials or read out indicators, car doors and car gates (excluding finished surfaces).
(13) Door safety edges including pulsed screen detectors and all associated elevators, etc.

c. Contractor agrees to keep car tops, pits and hoistways clean and free from dirt, oil, lint, debris and store items and to maintain each machine room in a clean and neat condition. Contractor shall replace all lamps, as required, for pit lights and machine room lights. Incandescent and fluorescent light bulbs will be furnished by the State.

d. Contractor shall replace main and car circuit disconnect fuses with fuses furnished by the State unless damaged by elevator equipment failure.

e. Contractor shall replace hoistway and machine room ventilation filters with filters supplied by the State.

f. Contractor shall renew all wire ropes as often as is necessary to maintain an adequate factor of safety and shall equalize the tension on all hoisting ropes, repair or replace conductor cables and hoistway and machine room elevator wiring as conditions may warrant.

g. Contractor also agrees, where appropriate, to shorten all ropes as necessary to provide continued safe operation and maintain normal traction.

h. Contractor also agrees to keep all guide rails free of rust and rail backs properly painted as needed, to renew all guide rollers or shoes as often as necessary to provide smooth and quiet operation, and to maintain proper tension of car and counterweight guides against the rails.

i. Contractor also agrees to keep all buffers and buffer stands clean, free of rust, and properly painted as needed.

j. Contractor shall check and adjust the group dispatching systems and make necessary tests to ensure all circuits and time settings are properly adjusted. Adjustments shall be made to provide optimum service and minimize response time. If required, this work shall be completed after hours at no additional cost to the State.

A.10. Periodic Examination and Reporting of Safety Devices

a. The Contractor also agrees to examine monthly all safety devices and governors and conduct annual no load test, and each fifth year subsequent to the previous testing date perform a full load, full speed test of safety mechanism, overhead speed governors and car and counterweight buffers on all traction elevator equipment and each third year subsequent to the previous testing date, on hydraulic elevators per A.S.M.E. A17.1, or most current code as adopted by the State of Tennessee (T.C.A. 68-121). In addition to A.S.M.E. A17.1 or most current code requirements, hydraulic elevators shall be full load tested during the first test of the third year of the contract time period including setting full load down speed at 110%. The car balance and the governor set will be checked. If required, the governor will be re-calibrated and sealed for proper tripping speed, and rails will be re-filed to restore a smooth running surface.

b. Written reports of said tests shall be submitted to the State and/or State's agent and, in the case of running safety tests, prior notification shall be given so that a designated representative of the State may be present. Monthly Inspection Checklists (see Attachment 4) shall be signed by both parties to confirm compliance with maintenance requirements under the contract. Monthly Inspection Checklist will be maintained in the Facility Administrator's (FA)/Building Manager's office and will be made available to staff and codes inspectors. With the permission of the State, alternate locations may be approved. In locations without an FA or Building Manager, the checklist shall reside in the tool room.

c. Contractor also agrees the Service Operations Manager (reference A.4.j.) shall attend monthly meetings with the State for the purpose of delivering, reviewing, and discussing a monthly written summary of all callbacks for repairs, maintenance, scheduling, and other contract compliance issues upon State request.

d. The intent and purpose of the meeting and summary are to minimize callbacks by the Contractor by keeping the State aware of performance trends, replacements, and other maintenance issues.

e. Annual Maintenance: Contractor also agrees to drain and flush hoist machine gear cases and bearing oil reservoirs annually and refill with the proper type and grade of oil. Where applicable, door operators shall be similarly drained, flushed and refilled annually. Any modifications to frequency intervals must be submitted in writing and approval obtained from the State once the contract is in effect. Date shall be recorded on the check chart.

f. Cleaning and Painting: Contractor shall clean equipment at regular intervals sufficient in frequency to maintain a professional appearance and preserve the life of the equipment. The Contractor shall maintain door tracks, hoistways, pits, machine rooms, and assigned elevator contractor work space in a clean and orderly condition free of dirt, dust, and debris.

Contractor shall paint the equipment at frequencies sufficient to maintain a professional appearance, prevent rusting, and preserve the equipment. All paint shall be suitable for the purpose intended and of high quality. Application of the paint, in all circumstances, shall comply with current A.S.M.E., ANSI, and other applicable local codes. Pit and machine room floors shall be kept painted "Deck Gray" or other colors as approved by the State. Exceptions for sealed, tiled or grated floors may be granted.

g. Lubrication: Contractor shall lubricate the equipment at intervals recommended by the equipment manufacturer or as dictated by the use of the equipment. All lubricants shall be suitable for the purpose intended and shall meet or exceed the minimum requirements specified by the manufacturer of the equipment to which the lubricant is applied. Lubricants, cleaning fluids, and all combustible liquids shall be stored in a metal cabinet in the machine room.

Appendix C
Training Record Forms

East Tennessee State University
Spill Prevention, Control, and Countermeasure Plan Training Roster

Training Topic _____

Training Date _____

Personnel	Unit / Assignment	Telephone Number

Appendix D
Spill Report Forms

ETSU Emergency Action Checklist				
Incident Title:				**Date:**
Reported By:				**Time:**
Status			**Steps To Be Taken in an Emergency Situation**	
Done	**To Do**	**NA**		
			1. Identify the source of the spill.	
			2. Provide first aid to any injured. Call 911 if assistance is required.	
			3. Notify:	
			a. Fire Department: Assistant Fire Chief or Fire Crew Chief (Incident Commanders) 911	
			b. Manager, Environmental Safety and Health ... (423) 439-6029 or (423) 202-1237	
			c. Maintenance Coordinator (Valleybrook)..... (423) 349-5357 or (423) 930-0060	
			d. Director, Environmental Health and Safety .... (423) 439-4081 or (423) 483-3862	
			4. Stop the flow of oil/hazardous substance (without endangering personnel).	
			a. Close valve.	
			b. Tighten gasket.	
			c. Shut down pump.	
			d. Complete any necessary action to stop the flow of oil/hazardous substance.	
			5. Close all spill drains.	
			6. Close/stop all downstream drains.	
			7. Estimate the amount and type of oil spilled or hazardous substance released.	
			8. Secure the area.	
			9. Identify hazards and immediate areas threatened.	
			10. Make initial external notifications in accordance with Table 16-2 of the SPCC Plan.	
			11. Initiate memorandum of agreements for support and response contractors as necessary.	
			12. Start cleanup.	
			13. Remove/reuse recovered material.	
			14. Complete follow up external notifications in accordance with Table 16-2 of the SPCC Plan.	

Notes:

NA = not applicable
SPCC = Spill, Prevention, Control, and Countermeasure

ETSU EHS Manager Checklist			
Done	**To Do**	**NA**	**Discovery and Notification**
			Ensure required installation, regulatory agency, and response contractor notifications are made.
Initial Actions			
			Spill response contractor activated (time):
			Evaluate the incident: • Materials involved – • Personnel hazards – • Fire/explosion hazard – • Total amount lost – • Recovered amount – • Evaporation/burned – • Uncontained – • Wildlife impact –
			Perform initial site safety characterization. Use Initial Site Safety and Control Analysis Form in this appendix.
			Prepare/deliver initial incident assessment briefing to spill management team.
			Advise the federal on-scene coordinator on actions being taken.
			Determine if support is sufficient: • Land response equipment needed – • Water response equipment needed –
Defensive Actions			
			Secure the source.
			Prepare and follow site safety plan: • Conduct site safety briefings for response personnel. • Establish decontamination procedures for response personnel. • Set up eyewash/washdown/decontamination station.
			Set up first-aid stations.
			Designate exposure monitoring personnel.
			Deploy response assets.
			Evacuations: • Facility evacuation • Community evacuation
			Request assistance if required.
			Establish site traffic control.

ETSU EHS Manager Checklist (continued)			
Done	**To Do**	**NA**	**Discovery and Notification**
			Establish command post and communications center.
			Establish unified command with federal and state on-scene coordinators.
			Obtain source(s) for material handling equipment.
			Communications: • Obtain cellular phones. • Establish working channels (VHF).
Recovery, Cleanup, and Disposition			
			Coordinate cleanup with federal (NRT, RRT, etc.), and state agencies.
			Obtain food and water for response personnel.
			Obtain sanitary facilities within reasonable distance of site.
			Document respiratory and/or skin reaction complaints.
			Initiate salvage operations.
			Implement/maintain fire control.
			Obtain samples for analysis.
Documentation and Cost Recovery			
			Prepare preliminary damage assessment and update frequently.
			Prepare natural resource damage assessment.
			Maintain field accounting for accurate cost tracking.
			Identify funding sources.
			Waste Management: • Type of oil or hazardous substance – • Amount of contaminated liquids – • Amount of contaminated solids – • Amount of hazardous materials –
			Determine proper storage procedures for contaminated materials.
			Determine proper disposal procedures for contaminated materials and coordinate disposal with appropriate federal and state agencies.
			Communicate available information on response activities to Public Affairs Officer (facts only, no speculation) for dissemination to media.

Notes:

NA = not applicable
NRT = National Response Team
RRT = Regional Response Team

ETSU Response Notification Form		
Incident Title:		
Reporter Information		
Reporter's Name		
Reporter's Telephone Number		
Reporter's Position		
Facility Name	East Tennessee State University	
Owner's Name	State of Tennessee	
Address	Street:	1276 Gilbreath Drive
	City:	Johnson City
	County:	Washington
	State:	Tennessee
	Zip Code:	37604
Materials Released?	☐ YES	☐ NO
Federal Reporting Requirements Met?	☐ YES	☐ NO
Responsible Parties Called?	☐ YES	☐ NO
Date and Time of Each NRC Notification (use 24-hour time)		

Notes:
NRC National Response Center

ETSU Response Notification Form (continued)	
Incident Title:	
Incident/Spill Description	
Source and/or Cause of Incident	
Date	
Time of Incident	
Incident Address/Location	
Nearest City	
County	
State	
ZIP Code	
Distance from City (miles)	
Incident Container Type	
Incident Tank Capacity	
Total Incident Capacity	
Weather Conditions	
Material Released (land or water)? ☐ YES ☐ NO	Total Quantity Released Material Released into Water? ☐ YES ☐ NO Quantity Released into Water

ETSU Response Notification Form (continued)	
Incident Title:	
Response Actions	
Initial Response Actions (Include Activity Name)	
Actions Taken to Control Incident (Include Responders' Names)	
Actions Taken to Mitigate Incident (Include Responders' Names)	

ETSU Response Notification Form (continued)	
Incident Title:	
Impact	
Number of Injuries	
Number of Deaths	
Evacuation(s) Required?	☐ YES ☐ NO
Number Evacuated	
Was There Any Damage?	☐ YES ☐ NO
Damage in Dollars (estimated)	
Medium (soil, water, etc.) Affected	
Description of Effect	
Additional Information about Medium (soil, water, etc.)	
Additional Information (any information about the incident not recorded elsewhere in the report)	

ETSU
Response Notification Form (continued)

Incident Title:

Notification Status	Contacted?	Date Contacted	Name/Contact	Call-Back Telephone Number
Fire Department: 911	☐ Yes ☐ No			
EHS Manager: (423) 439-6029 or (423) 202-1237	☐ Yes ☐ No			
Maintenance Coordinator (Valleybrook): (423) 349-5357 or (423) 930-0060	☐ Yes ☐ No			
EHS Director: (423) 439-4081 (423) 483-3862	☐ Yes ☐ No			
NRC: (800) 424-8802	☐ Yes ☐ No			
U.S. EPA Region 4, USCG Sector Ohio Valley and other State agencies as necessary: covered by call to NRC	☐ Yes ☐ No			
Washington County Emergency Management Agency (423) 434-6081	☐ Yes ☐ No			
Spill Response Consultant: EnSafe Inc. (888) 590-8885	☐ Yes ☐ No			

Notes:
U.S.EPA = U.S. Environmental Protection Agency
USCG = United States Coast Guard
NRC = National Response Center
SPCC = Spill Prevention, Control, and Countermeasures

ETSU
Response Notification Form (continued)

Incident Title:

Notification Status	Contacted?	Date Contacted	Name/Contact	Call-Back Telephone Number
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			
	☐ Yes ☐ No			

Notes:
NRC = National Response Center
SPCC = Spill Prevention, Control, and Countermeasure
U.S. EPA= U.S. Environmental Protection Agency
USCG = United States Coast Guard

ETSU
Initial Site Safety and Control Analysis – Part 1

Incident Title:	**Date Prepared:**	**Time Prepared:**	**Location:**

To be completed by EHS Manager prior to any immediate response actions.

Incident Commander:

1. Wind direction across incident:	Toward your position ☐	Away from your position ☐

2. Are people trapped or injured? ☐ Yes ☐ No

3. Are people involved as unorganized observers or involved in rescue attempts? ☐ Yes ☐ No

4. Are there any immediate signs of potential hazards?	a. Electrical lines down or overhead?	☐ Yes ☐ No
	b. Unidentified liquid or solid products visible?	☐ Yes ☐ No
	c. Colored vapors visible?	☐ Yes ☐ No
	d. Smells which are not natural noted?	☐ Yes ☐ No
	e. Fire, sparks nearby, sources of ignition present?	☐ Yes ☐ No
	f. Holes, caverns, deep ditches, fast-moving water, cliffs nearby?	☐ Yes ☐ No
	g. Is local traffic a potential problem?	☐ Yes ☐ No
	h. Signs, placards, or color codes indicating danger?	☐ Yes ☐ No
	i. Spill zone	☐ Dry ☐ Wet ☐ Icy

5. As you approach the scene from the upwind side, did you note a change in the status of any of the above?
☐ Yes ☐ No

6. Have you established control of the area involved in the incident?

Hot Zone	☐ Yes ☐ No
Warm Zone	☐ Yes ☐ No
Incident Site	☐ Yes ☐ No

7. Have you determined the necessity for any of the following?	a. Security?	☐ Yes ☐ No
	b. Hazardous material technician to identify or monitor substances involved in the incident?	☐ Yes ☐ No
	c. Protective gear and to what level of protection?	☐ Yes ☐ No
	d. Site for decontamination center?	☐ Yes ☐ No
	e. Site for command center?	☐ Yes ☐ No
	f. Safety equipment you will need to eliminate the problems?	☐ Yes ☐ No
	g. Placement of the warning sign? (i.e., benzene, no smoking, etc.)	☐ Yes ☐ No
	h. Number of personnel needed to control the situation?	☐ Yes ☐ No

Notes:

1. Before entering a potentially hazardous work environment, **IT MUST BE EVALUATED BY A COMPETENT PERSON** to establish safe work practices, personnel protective equipment, and other control procedures. As a minimum, lower explosive limit, oxygen, and benzene concentrations must be evaluated.
2. Spill cleanup areas shall be controlled as "regulated areas." If benzene vapors are or may be expected to equal the action level of 0.5 part per million, then the area must be posted with the following warning:

DANGER – BENZENE
CANCER HAZARD
FLAMMABLE – NO SMOKING
AUTHORIZED PERSONNEL ONLY
RESPIRATOR REQUIRED

ETSU
Initial Site Safety and Control Analysis – Part 2

Incident Title:	**Date Prepared:**	**Time Prepared:**	**Location:**

1. Review your "Initial Site Safety and Control Analysis" report.
2. Use the map provided in the Red Plan. Mark the incident and prevailing wind direction. Include at least two major landmarks and an address, if known.
3. *Analysis of potential harmful substances on scene and exposure factor:

Type of Substance	**Container**	**Secure?**

4. *Protective gear required:
   a. Respirator protection required? ☐ Yes ☐ No
      If yes, what type_____
   b. Self-contained breathing apparatus required? ☐ Yes ☐ No
   c. Protective clothing required? ☐ Yes ☐ No

   If yes, what level of protection is required and describe in detail:

5. Set up monitoring system, if required.

* To be completed by EHS Manager or qualified technician.

ETSU
Initial Site Safety and Control Analysis – Part 2 (continued)

Incident Title:	**Date Prepared:**	**Time Prepared:**	**Location:**

6. Is a vehicle/vessel/tank involved? ☐ Yes ☐ No

If yes:

Driver's/Captain's Name:	Driver's/Captain's License:
Equipment/Vehicle Number:	Tractor/Trailer Number:
Railcar Number:	Vessel Number:
Ship Name and Number:	

7. General Information:

Carrier's Name:	Telephone Number:
Manufacturer of Chemical:	Telephone Number:
Point of Origin:	Destination:
Ship Name and Number:	

8. Call 911 if medical assistance is required. Call Security as threat conditions warrant.

9. *Determine degree of decontamination required and designate area.

10. Set up secure area and notify area residents, if applicable.

11. Establish safe work practices, personnel protective equipment requirements, and area vapor monitoring requirements. Conduct a field meeting with all personnel to explain in detail communication requirements, personal protective equipment, and other site-specific requirements as necessary.

12. Start control, containment, cleanup decontamination, and disposal process.

* To be completed by EHS Manager or qualified technician.

ETSU Initial Site Safety and Control Analysis – Part 2 (continued)			
Incident Title:	**Date Prepared:**	**Time Prepared:**	**Location:**

Prepared by:	**EHS Manager**
Contents	
General Advisories	
Division/Group	
Chemical/Physical Hazards	
Precautions	
Approved by	Incident/Deputy Commander
Distribution	All Recipients of Incident Action Plans
Additional Notes/Items of Importance	

Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

EAST TENNESSEE STATE UNIVERSITY (ETSU)
RED PLAN[1]

Table Red Plan-1
Immediate Response Actions

Action	Comments
1. Alert personnel within the immediate area.	Have nonessential personnel evacuate to the area *upgradient and upwind* and report to a designated meeting place. If there are fuel vehicles in the area, have the drivers relocate them **if it is safe to do so**. Control the perimeter of the spill area.
2. Identify the materials that have been spilled.	Check the Safety Data Sheets (SDS) for each chemical if you are unfamiliar with the hazards and wear proper personal protective equipment. **Do not attempt to clean up the spill if you are not properly trained to do so.**
3. Eliminate the source of the spill.	Immediately shut off the source of the spill or upright the container **if it is safe to do so**. Minimize and contain the spill.
4. Eliminate flame or other sources of ignition.	Extinguish any source of spark or flame in the area. Cease operation of machinery near the spill.
5. Report the spill.	Get help as soon as possible. Report the spill to your supervisor. **Call the Fire Department at 911.**
6. Contain and absorb.	Keep the spill from spreading by using absorbent or other spill response materials. Block or divert from storm drains, ditches, or ventilation systems.
7. Clean up and decontaminate.	Once the spilled material is absorbed, remove all contaminated materials and decontaminate equipment and responders.
8. Dispose.	After decontamination, all materials must be properly packaged for disposal and labeled in accordance with hazardous waste disposal procedures such as Title 29 Code of Federal Regulations (CFR) Part 1200.
9. Restore surroundings.	Be sure all safety and cleanup equipment and materials are replenished and ready for future use.

[1] In the event of a spill at ETSU, the Red Plan serves as the "Jump Start" for initiating response actions. All information contained in the Red Plan has been extracted directly from the Spill Prevention, Control, and Countermeasure (SPCC) Plan. The Red Plan user is expected to transition to the SPCC Plan as soon as possible.

Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

Table Red Plan-2 "Key" Emergency Personnel/Offices	
Johnson City Fire Department	**911 (on/off duty hours primary) (423) 975-2840 (non-emergency)**
Johnson City Police Department	**911 (on/off duty hours primary) (423) 434-6160 (non-emergency)**
EHS Manager	**(423) 439-6029 (on duty hours, primary) (423) 202-1237 (off duty hours)**
EHS Director	**(423) 439-4081 (on duty hours, primary) (423) 483-3862 (off duty hours)**
Spill Consultant	**(888) 590-8885 (on/off duty hours, primary) (615) 255-9300 (non-emergency)**
Department of General Services Environmental Compliance Manager	**(615) 741-9225 (on duty hours, primary) (615) 428-8101 (off duty hours)**

Table Red Plan-3 "Immediate" External Notifications	
National Response Center (Federal Reporting Requirements — notifies U.S. Environmental Protection Agency [U.S. EPA] Region 4 U.S. Coast Guard [USCG] District 8 if applicable; and other State agencies as necessary)	**(800) 424-8802**
Ambulance – Washington County/Johnson City Emergency Medical Services	**911 (423) 975-5500**
Air Evac – Air Critical Care	**911 (800) 550-1025**
Hospital – Johnson City Medical Center	**911 (423) 431–6111**
U.S. Environmental Protection Agency Region 4, Emergency Response Branch (24-hr)	**(404) 562-8700**
Tennessee Emergency Management Agency	**(615) 741-0001**
Johnson City - Washington County Emergency Management Agency	**911 (423) 434-6081**
Tennessee Department of Environment and Conservation (Johnson City Environmental Field Office)	**(423) 854-5400 (888) 891-8332**

Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

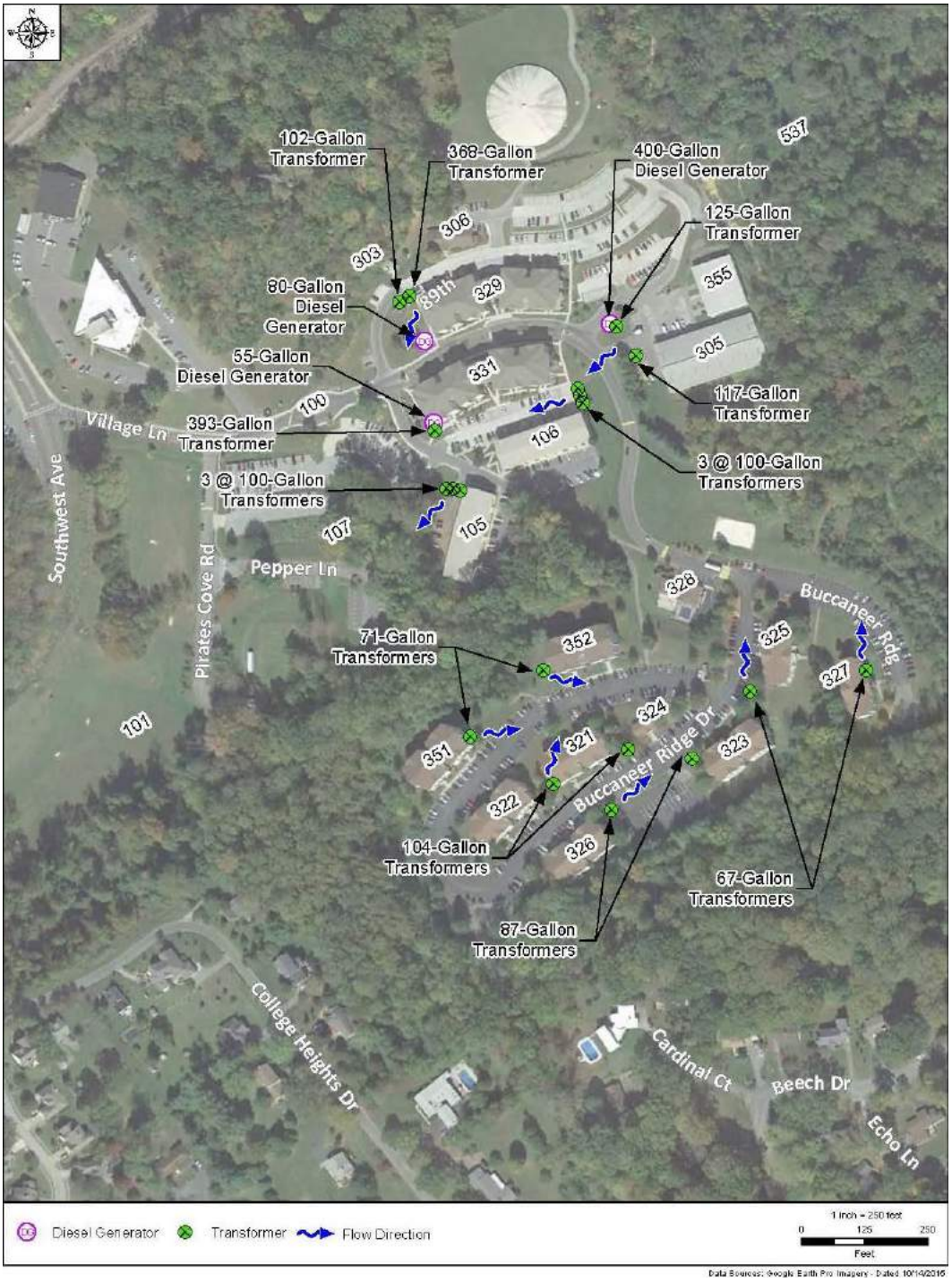
Table Red Plan-4 Immediate Spill Notification Form	
DO NOT DELAY NOTIFICATION PENDING COMPLETE INFORMATION	
Time:	Date:
Name and Location of Facility/Building Number:	
Name of Individual Making Report:	
Contact Phone Number:	
Type of Product Spilled:	Time of Spill:
Quantity Released:	Duration of Release:
Did the Spill Reach Navigable Waters?	☐ YES ☐ NO
Cause and Source of Discharge:	
Actions Being Taken:	
Injuries or Deaths:	☐ YES ☐ NO

Safety Considerations -

- Consider potential safety and health hazards for each spill.
- Use the "buddy system" for entry.
- Obtain current health hazard data.
- Do not work in environments that exceed your training or capabilities.
- Inform supervisor of intended destination and estimated time of return.
- Do not unnecessarily enter or travel into spill areas.
- Avoid skin contact with spilled material.
- Use proper personal protective equipment, minimally:
  - Hard hat
  - Gloves
  - Coveralls
  - Boots
  - Eye/face protection.
- Do not rely on your senses to determine hazardous conditions - use calibrated detection devices.

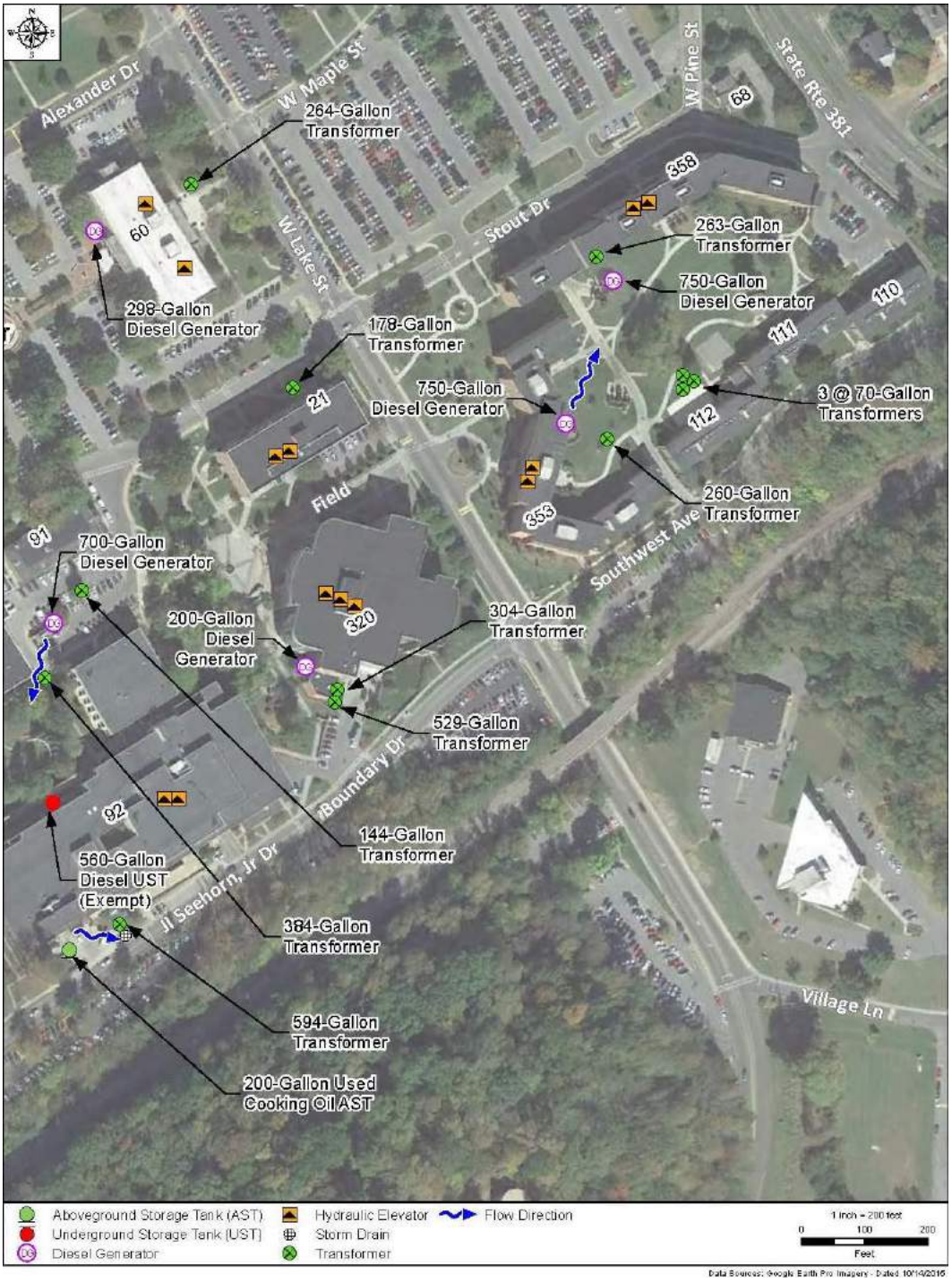
Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare



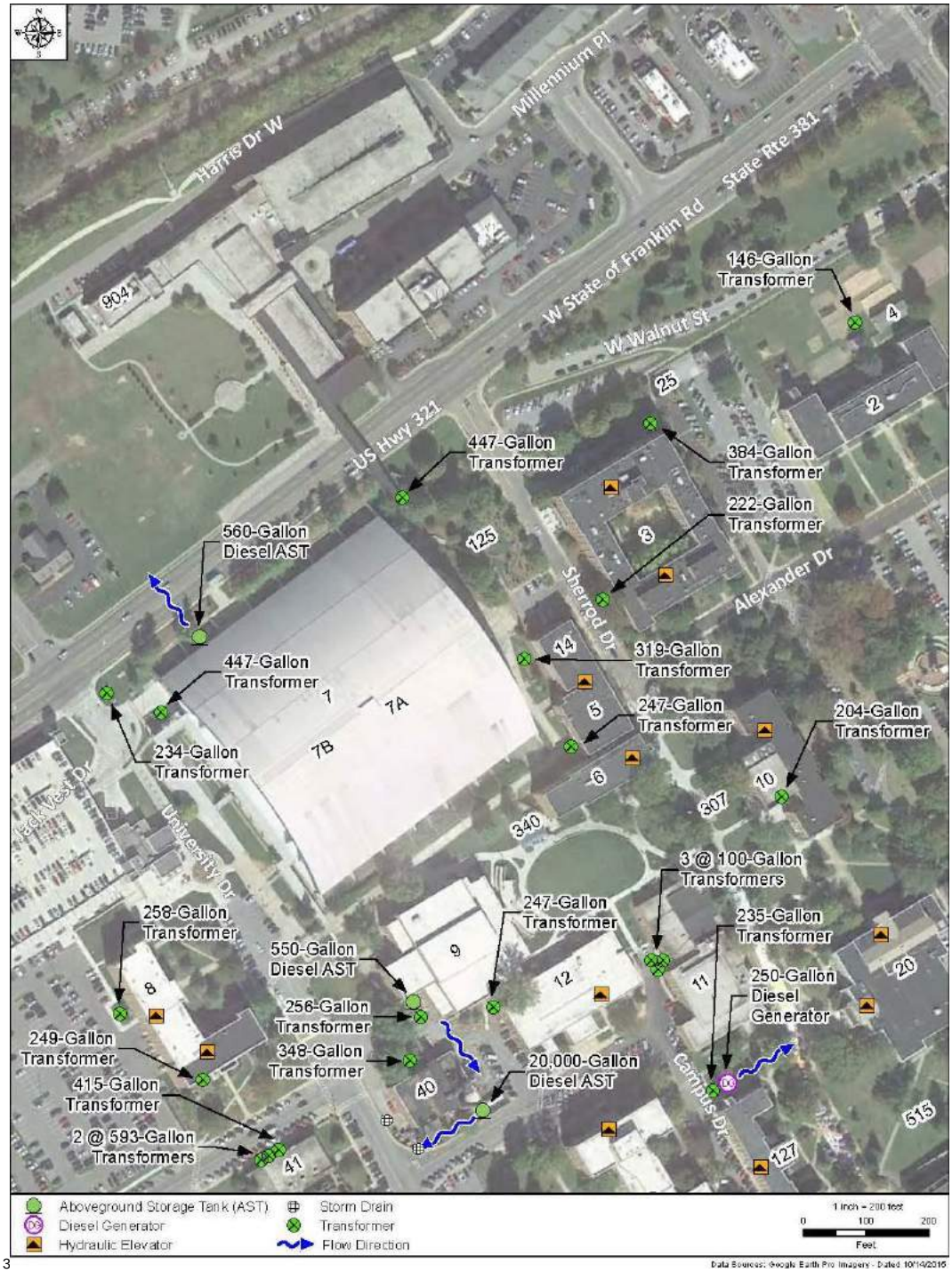
Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare



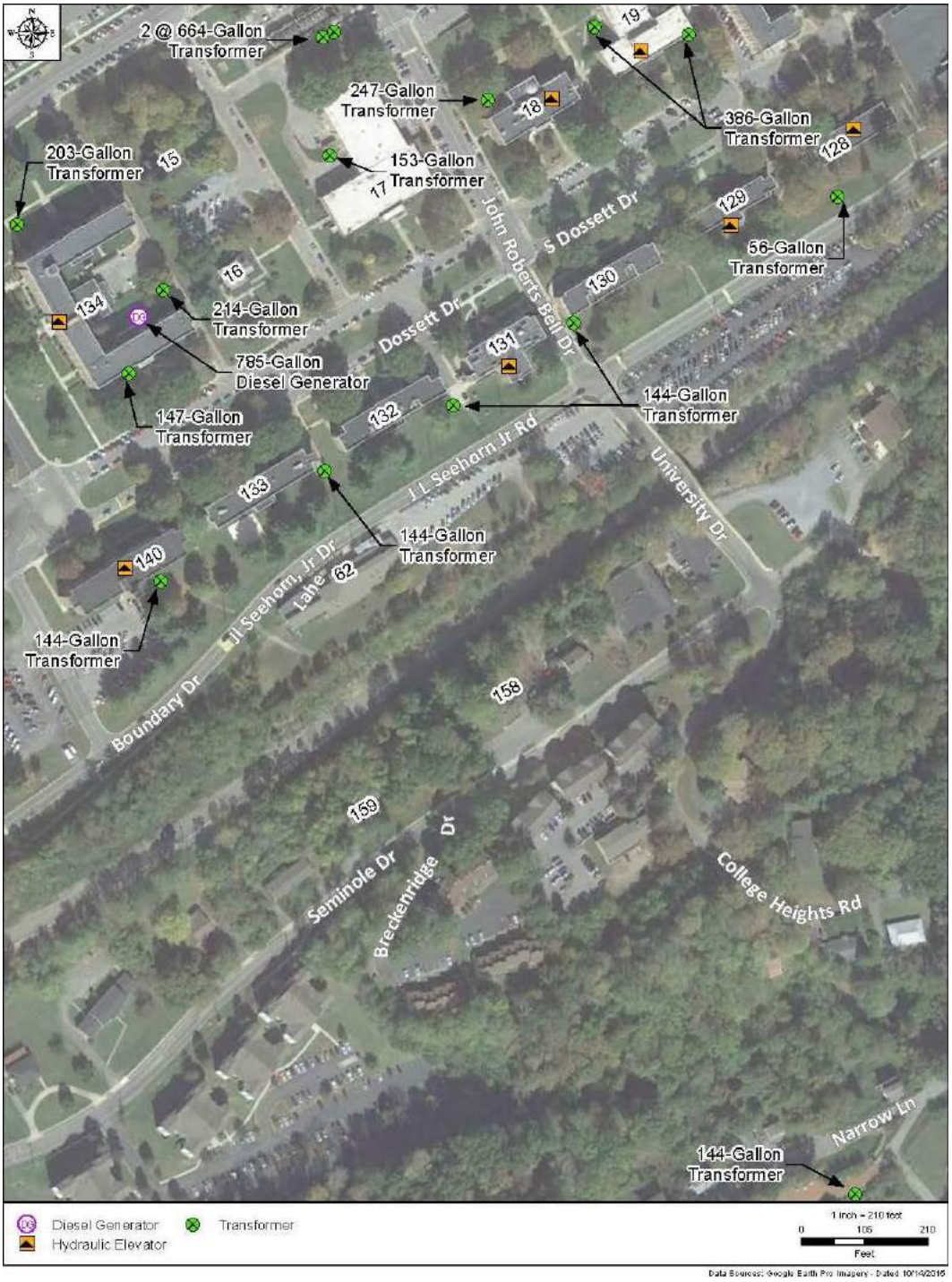
Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare



Protection Priorities	- Human Life - Natural Resources - Property, Economic, and Public Impact

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare



Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare

Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

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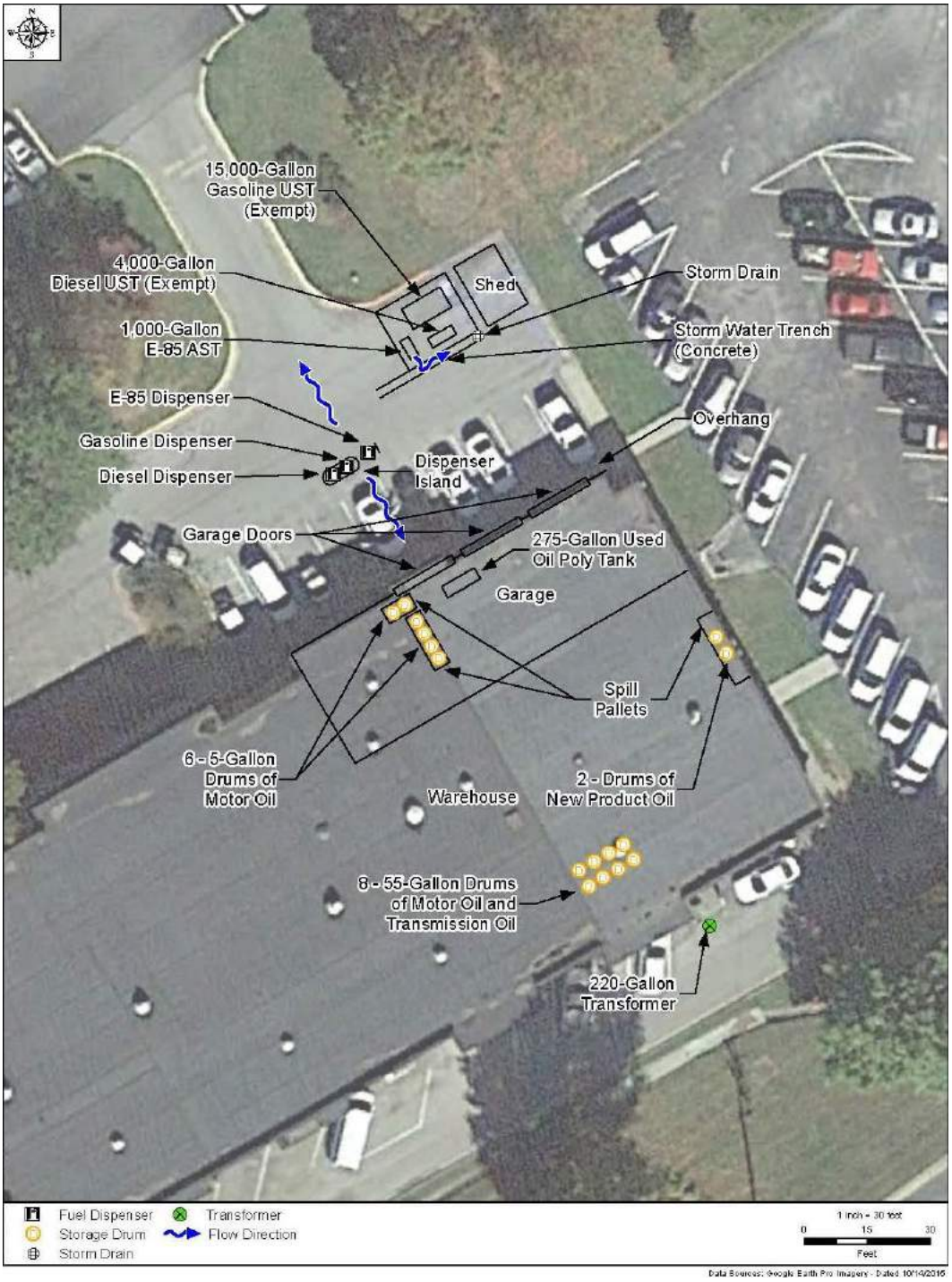
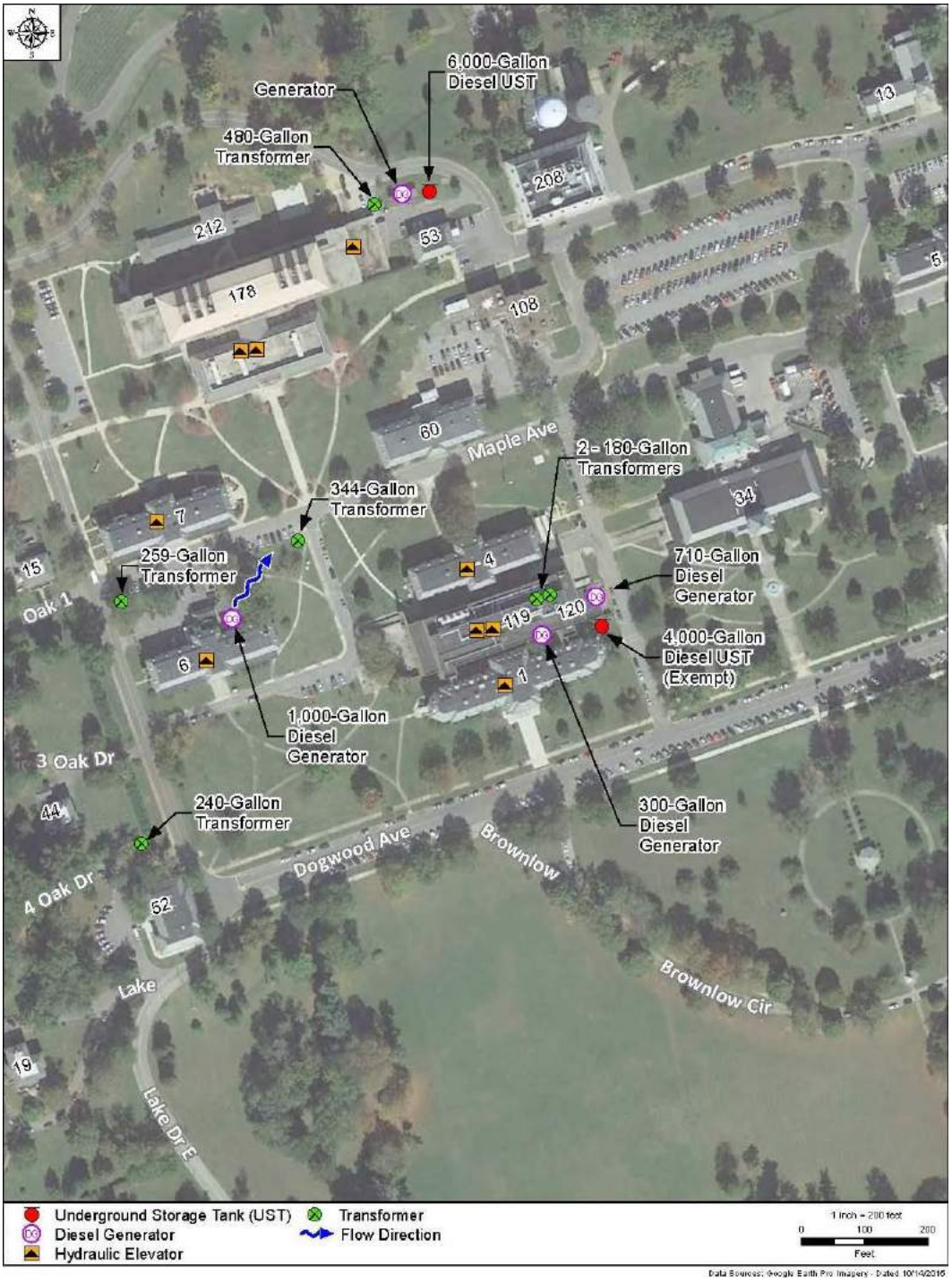


Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare



Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare

Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

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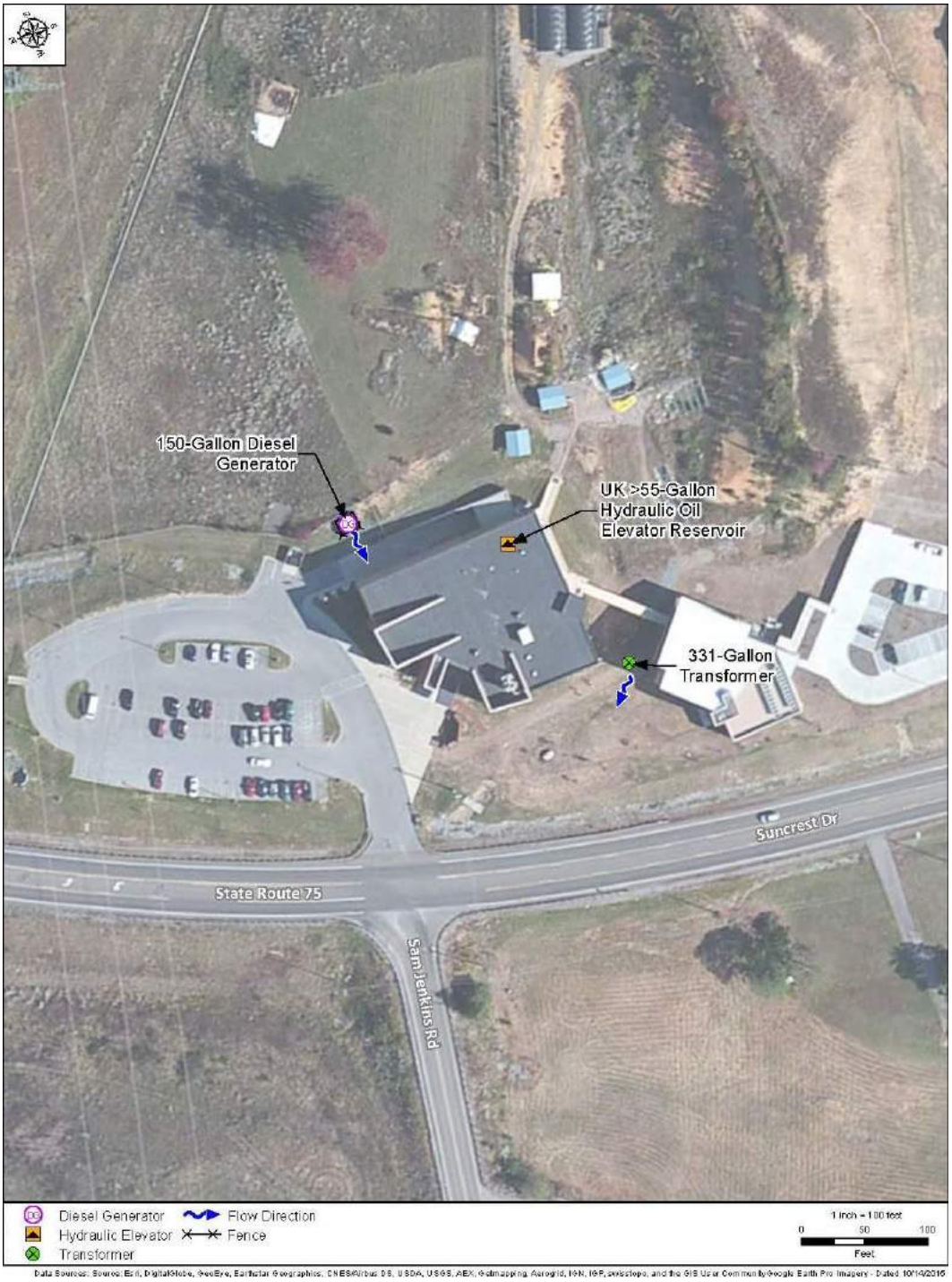
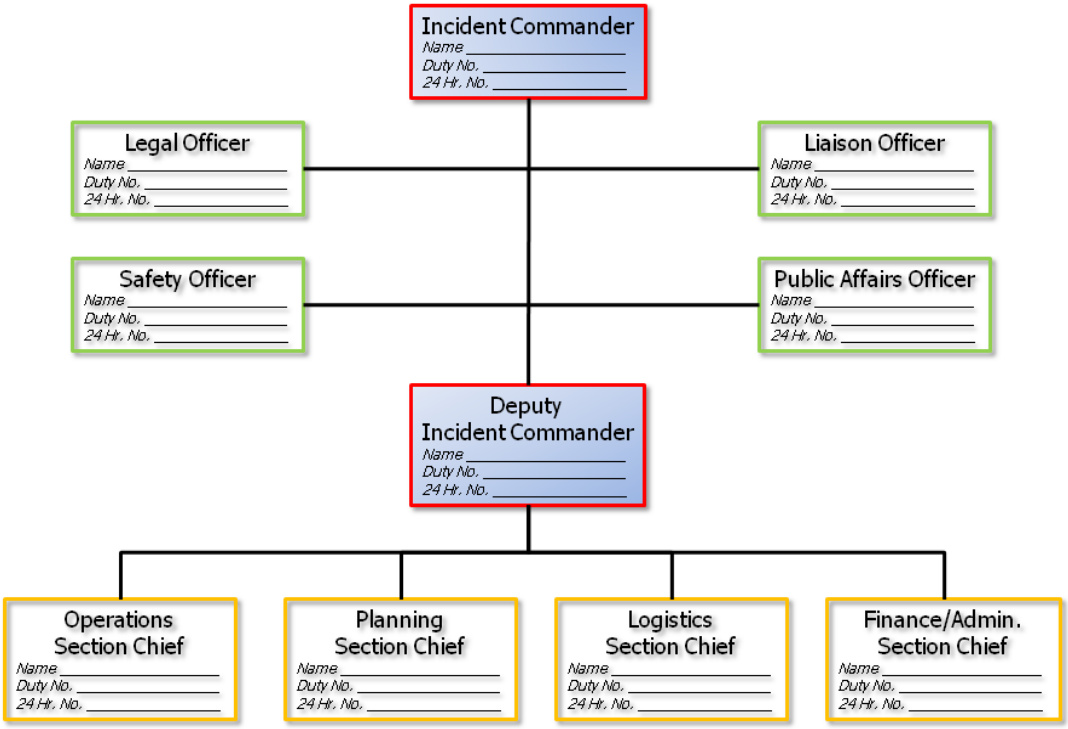


Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	1. Incident Name:	2. Date Prepared:	3. Time Prepare

Current Organization



Resource Summary:

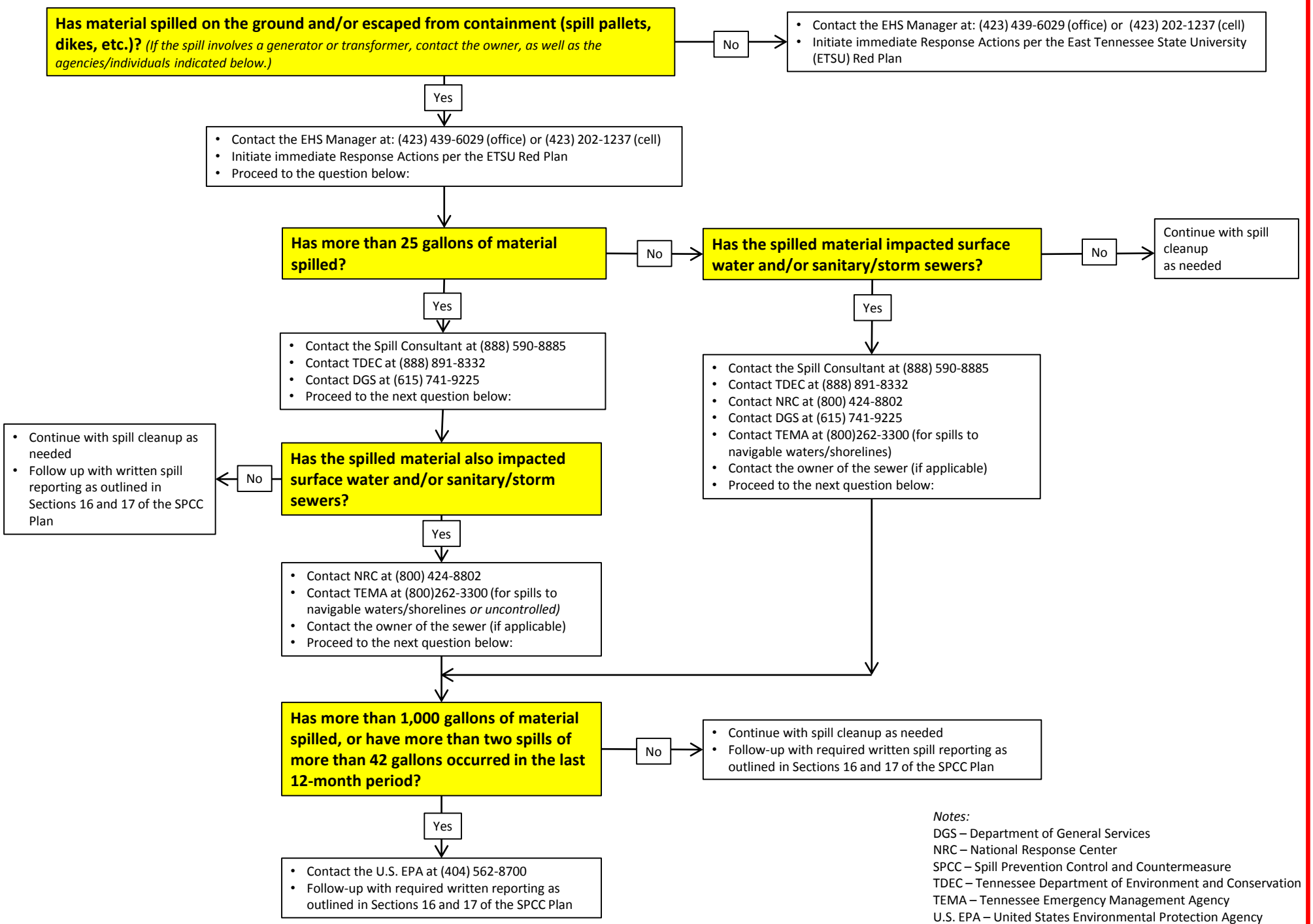
Resources Ordered	Resources identified	ETA	On Scene	Location/Assignment

Protection Priorities	**- Human Life** **- Natural Resources** **- Property, Economic, and Public Impact**

INCIDENT BRIEFING	**1. Incident Name:**	**2. Date Prepared:**	**3. Time Prepare**
Command Objectives:			
Summary of Current Actions:			
	Page _____ of _____		Prepared by:

Initial Spill Contact Flow-Chart:

*This flowchart is meant to aid in determining under what conditions agencies/individuals should be contacted during initial spill response activities. Use this flowchart **after** contacting emergency services at 911 (if needed in the event of injuries, fire, etc.). If the spill cannot be controlled or cleaned by facility personnel, TEMA should be contacted at (800) 262-3300.*



Notes:
DGS – Department of General Services
NRC – National Response Center
SPCC – Spill Prevention Control and Countermeasure
TDEC – Tennessee Department of Environment and Conservation
TEMA – Tennessee Emergency Management Agency
U.S. EPA – United States Environmental Protection Agency

FIRST RESPONDER REPORTING FORM

Collect as much of the following information as reasonable before making initial notification.

Critical Information	
Name and rank of reporting individual	
Location of spill (building/area number, indoors or outside)	
Number of injured personnel	
Type of injuries	
Substance(s) spilled	
Estimated quantity spilled	
Rate of discharge/release	
Time of spill	
Extent of spill travel	

Does the Fire Department need to respond to protect life, property, or environment?	Yes	No

Additional Information (i.e., other potential hazards)

Initial information is critical. Get as much information as you can, but don't hesitate to make the initial notification if a spill is moving or worsening rapidly!

REVERSE CARD FOR SPILL RESPONSE ACTION