

# **Clemson University Spill Prevention Control & Countermeasure Plan**

W. Robert Newberry, IV CIH, CHMM  
Chief Environmental Health and Safety Officer

## Management Approval

This SPCC Plan has the complete support of management at Clemson University and will be implemented as herein described. I am at a management level with authority to commit the necessary resources.

Signature: \_\_\_\_\_

Scott Ludlow

Chief Business Officer

## Certification

As required in 40 CFR 112.3(d), I certify that I am familiar with the requirements of the SPCC rule; that I have visited and examined the facility; that this plan was prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of the SPCC rule; that procedures for required inspections and testing have been established; and that this SPCC plan is adequate for this facility.

Printed Name of Registered Engineer: \_\_\_\_\_

Signature of Registered Engineer: \_\_\_\_\_

Registration No.: \_\_\_\_\_

State: South Carolina \_\_\_\_\_

Date: \_\_\_\_\_

Engineer Seal:

## Emergency Contact List

Clemson University Fire department

Emergency 911

Non-Emergency (864) 656-2322

Clemson University Environmental Health & Safety

Main Campus

Main Number (864) 656-2583

After Hours: (864) 654-2628 (EHS Director)

Alternate after hours: (864) 650-8150 (EHS Director)

Farms, RECS, and Satellite Facilities off campus

Main Number (864) 656-0792 (Jim Clark)

After Hours: (864) 650-8156 (Jim Clark)

Alternate after hours: (864) 996-9359 (Jim Clark)

University Facilities

On-Campus (864) 656-2186

Spill Response and Cleanup (Main Campus and Satellite Facilities)

JBR Environmental Services

**1-800-583-3019**

(Clemson University Contract Manager for this contract – Phil Carroll 656-1770)

Contact for containers owned by other concerns:

Duke Power (EHS Office) **(704) 373-7894**

Blue Ridge Electrical Cooperative **(800) 240-3400**

Carolina By-Products **(800) 849-2254**

South Carolina Department of Health and Environmental Control

(803) 253-6488 (within 2 hours of oil entering surface water and if 10 gallons or more spilled on land)

National Response Center (NRC)

(800) 424-8802 (within 2 hours of oil entering surface water, including wetlands, storm water and sanitary sewers)

## **Site-Specific Information**

The following is site-specific information employing the number system shown in 40 CFR 112.4 for onshore non-transportation facilities, which due to their location could reasonably be expected to discharge oil in harmful quantities, as defined in 40 CFR 110, into or upon navigable waters of the United States.

Due to the University's proximity to Lake Hartwell and the old Seneca River, which are navigable, and the volume of oil products stored on the main campus, the University is required to prepare a Spill Prevention Control and Countermeasure Plan (hereinafter "SPCC Plan") in writing and in accordance with 40 CFR 112.7. The SPCC Plan is included below.

### **(1) Name of Facility**

Clemson University main campus and outlying properties

### **(2) Name of Owner/Operator of Facility**

State of South Carolina

University President: James Barker

### **(3) Location of Facility**

Clemson, South Carolina

### **(4) Date/Year of Initial Facility Operation**

The Clemson University campus was built circa 1889 and has been in operation at this location since that date.

### **(5) Maximum Storage Capacity and Normal Daily Throughput**

#### **COOKING OIL / TALLOW**

- There are nine (9) containers that hold waste cooking oil from the dining service areas on Clemson University properties. All containers are identical (250 gallons), and the oil is recycled by Carolina By-Products (CBP) of Gastonia, NC. The total capacity of these containers is 2250 gallons. Daily throughput is negligible. A list of waste cooking oil containers with GPS location may be found in Table 7a of this report.

## **(5) MAXIMUM STORAGE CAPACITY AND NORMAL DAILY THROUGHPUT (CONT.)**

### **DRUMS**

- There are a number of 55 gallon containers scattered throughout the Clemson University central campus and proximal locations. An exact count is problematic due to the convenience and ease of storage of 55 gallon drums, but to the best of knowledge of Clemson University, the list of oil containing drums with GPS location found in Table 7b of this report is complete. While surveying for this SPCC, a total of 102 drums were discovered (this includes the twelve used / waste oil drums discussed below) for a total capacity of 5610 gallons. Daily throughput is negligible.

### **WASTE OIL DRUMS**

- There are three (3) 55 gallon drums at the Motor Pool on Klugh Avenue that contain used oil or used petroleum based solvent such as mineral spirits. Daily throughput is negligible.
- There are two (2) 55 gallon drums at the Recycling Center on Kite Hill that contain waste oil. Daily throughput is negligible.
- There is a waste petroleum based solvent 55 gallon drum at the Paint Shop, and a waste oil 55 gallon drum at the Truck Maintenance facility (both are within the University Facilities area on Klugh Avenue). Daily throughput is negligible.
- There are five (5) 55 gallon waste oil drums in the garage area just East of McAdams Hall on South Palmetto Boulevard. Daily throughput is negligible.
- There is a 55 gallon waste oil collection drum at the Simpson Research Center on Lebanon Road in Pendleton, SC. The total volume of these drums is 715 gallons. Daily throughput is negligible.

Total capacity of these drums, along with a complete list with GPS location is included with those in Table 7b of this report.

### **FUEL TANKS (ALL KINDS)**

- There are two (2) 6000 gallon underground storage tank storing gasoline, one 2,000 gallon underground storage tank storing gasoline, and one 3,000 gallon underground storage tank storing diesel fuel located at the Motor Pool on Klugh Avenue. These tanks supply several dispensing pumps for refueling University vehicles. These tanks are double walled and were leak tested on site by the contractor at installation to 4 psi. The product lines were also tested to 200 psi. The tanks and lines have a leak detection system and alarm. The tanks are installed with a mechanical anti-siphon valve to prevent a big leak from the tanks should the lines ever be ruptured. The normal daily throughput varies, but is estimated to be 750 gallons per day.

## **(5) Maximum Storage Capacity and Normal Daily Throughput (cont.)**

- There are two (2) 12000 gallon underground storage tanks storing jet fuel outside the Clemson University hangar at the Oconee County Airport located on 365 Airport Road in Seneca, SC. These tanks are double walled and were leak tested on site by the contractor at installation to 4 psi. The product lines were also tested to 200 psi. The tanks and lines have a leak detection system and alarm. The tanks are installed with a mechanical anti-siphon valve to prevent a big leak from the tanks should the lines ever be ruptured. The normal daily throughput varies, but is estimated to be 200 gallons per day per container.
- There is a 550 gallon above ground storage tank located at the Sears House on 436 Old Greenville Highway (SC Highway 93) in Clemson. Normal daily throughput varies with the seasons, but is estimated at 15 gallons per day.
- There is a 1000 gallon above ground tank of Unleaded Gasoline, and a 500 gallon above ground tank of Kerosene located at the Morgan Poultry Center on 224 Old Cherry Road in Clemson. Normal daily throughput is estimated to be less than 100 gallons per day per container.
- There are two (2) 2000 gallon above ground tanks of Unleaded Gasoline, and a 2000 gallon above ground tank of diesel fuel located at the Cherry Farm on Hopewell Road in Clemson. Normal daily throughput is estimated to be less than 100 gallons per day per container.
- There is a 300 gallon above ground tank of Diesel Fuel, and a 200 gallon above ground tank of Diesel Fuel located at the Starkey Center on 201 Starkey Drive in Pendleton, SC. Normal daily throughput is estimated to be less than 50 gallons per day per container.
- There are two (2) 2000 gallon above ground tanks of Unleaded Gasoline, one 2000 gallon above ground tank of Diesel Fuel, and one 100 gallon above ground tank of Diesel Fuel located at the Simpson Research Center on Lebanon Road in Pendleton, SC. Normal daily throughput is estimated to be less than 100 gallons per day per container.
- There is a 600 gallon above ground tank of Diesel Fuel, a 300 gallon above ground tank of Diesel Fuel, and a 300 gallon above ground tank of Unleaded Gasoline at the Musser Fruit / Vegetable farm on 604 South Friendship Road in Seneca, SC. Normal daily throughput is estimated to be less than 50 gallons per day per container.
- There are two (2) 500 gallon above ground containers of Diesel Fuel located at the Forestry Field Service location on Hugo Road in Seneca, SC. Normal daily throughput is estimated to be less than 50 gallons per day per container.
- There is a 600 gallon above ground container of Diesel Fuel, and a 150 gallon above ground container of Unleaded Gasoline located at the new Forestry Services area S of the South Carolina Botanical Gardens. Normal daily throughput is estimated to be less than 50 gallons per day per container.

## **(5) Maximum Storage Capacity and Normal Daily Throughput (cont.)**

- There is a 1000 gallon above ground container of Unleaded Gasoline, a (temporary as of the date of this report) 550 gallon above ground container of Unleaded Gasoline, and a 1000 gallon above ground container of Diesel Fuel located at the Golf Course Maintenance Facility on 100 Madren Center Drive in Clemson. Normal daily throughput is estimated to be less than 100 gallons per day per container.
- There is a 500 gallon above ground container of Diesel Fuel located at Freeman Hall on Fernow Street. Normal daily throughput is estimated to be less than 50 gallons per day.
- There is a 75 gallon above ground container of unnamed fuel located at the garage E of McAdams Hall on South Palmetto Boulevard. Normal daily throughput cannot be estimated at this time, but is assumed to be less than 10 gallons per day.
- There is a 1000 gallon above ground container of Diesel Fuel located at the CETL SE of campus on 100 Technology Drive in Anderson, SC. Daily throughput is estimated to be less than 100 gallons per day.
- There is a 2000 gallon above ground storage tank located at the Ag BioTech building on 1253 Cherry Road for purposes of fuel storage for the associated generator. Daily throughput is negligible, except in times of emergency.
- There is a 500 gallon above ground bulk oil storage container in the garage area of the Motor Pool on Klugh Avenue. Daily throughput is estimated to be less than 50 gallons per day.
- There are two (2) 190 gallon above ground heating oil reservoirs located beneath large space heaters at the Kite Hill Recycling Center (paper recycling building). Normal daily throughput is seasonal, but estimated to be less than 50 gallons per day.

The total storage capacity of all fuel tanks (including two 12,000 gallon Fuel Oil tanks behind the University Steam Plant to be fully described below) is >87,205 gallons (the capacity of an underground tank on the Golf Course – GFUST - cannot be determined and has been set at >55 gallons), and a complete listing with GPS location may be found in Table 7c of this report.

## **(5) MAXIMUM STORAGE CAPACITY AND NORMAL DAILY THROUGHPUT (CONT.)**

### **GENERATORS**

- There are thirteen (13) power generators on Clemson University properties that have a fuel capacity of greater than 55 gallons (those fueled by LP Gas are found under the listing for propane). The total capacity of these generator tanks is 5992 gallons, and a complete listing with GPS location may be found in Table 7d of this report. A list showing generators of all capacities is provided by Clemson University Facilities, and may be found in Table 9a of this report. Daily throughput is only noted once a week for maintenance purposes, and in time of emergency or power outage, and is considered to be negligible for this reason.
- There is a portable generator of >55 gallon capacity temporarily located at the Simpson Research Center. This generator has been placed in this plan because employees of the Center stated that the generator was found in this location more than 90% of the time. It does not fit the criteria under 40CFR 122.7, but has been listed and a GPS location taken for the sake of completeness.

### **HEATING/ FUEL OIL (ALL KINDS)**

- There are thirty-one (31) 550 gallon underground storage tanks storing fuel oil for housing units in the Douthit Hills subdivision on the NE side of the University. There is a listing of these tanks with an accompanying map in Table 9f of this report. The total maximum storage capacity for these is 17,050 gallons; the average daily throughput varies with the seasons, but is estimated to average 15 gallons per day per tank.
- There are two (2) additional underground storage tanks that are used for this purpose - one is located at the recycling center at the old Zoology Building and is assumed to be 550 gallons (no data is available), and the other is located at the Dropout Prevention Center on 209 Martin Street, just N of the Douthit Hills subdivision. The capacity of this tank is assumed to be 1000 gallons because of a document that asserts this in the Clemson University files. All Heating Oil tanks are listed in Table 7e of this report.
- There is a 3000 gallon underground storage tank located at the Ravenal Center on Hugo Road in Seneca, SC. Daily throughput is unknown, and the tank has been listed with the Fuel Tanks in Table 7c of this report owing to a lack of specific knowledge about the function of this tank.
- The Old Insectory on Pendleton Road has one 1,000 gallon underground storage tank and one 280 gallon underground storage tank both for the storage of fuel oil. The average daily throughput is nonexistent as the site has been abandoned for some time.

## **(5) Maximum Storage Capacity and Normal Daily Throughput (cont.)**

- There are two (2) 12,000 gallon above ground fuel oil tanks storing # 2 fuel oil located behind the University Steam Plant on Klugh Avenue. These tanks are listed along with the fuel oil tanks in Table 7c, and are used for emergency back-up for the Steam Plant Boilers. Daily throughput is negligible.

The total storage capacity of all heating oil tanks (with the exception of the two behind the University Steam Plant) is 20,430 gallons, and a complete listing with GPS location may be found in Table 7e of this report.

## **HYDRAULIC TANKS**

- There are forty-four (44) tanks that contain hydraulic fluid used in many elevators on Clemson University properties. The great majority of these are found in service rooms adjacent to the elevator shaft, and most are within the central campus of the University. The total capacity of these tanks is 5623 gallons. A list of these tanks with GPS location may be found in Table 7f of this report. Daily throughput is negligible.

## **PROPANE**

- There are fifty four (54) liquid propane storage tanks scattered throughout the campus which present no hazard to the navigable waters or adjoining shorelines of the U.S. as the propane would disperse as a gas immediately after a spill, but are included here for completeness sake. A complete listing of propane tanks (regardless of function) with GPS location are listed in Table 7g of this report. All above ground tanks are listed in Table 6. All underground propane tanks are listed in Table 5 with other campus UST's, but none are included in the threshold capacity for the SPCC.

## **ELECTRICAL SWITCHES**

- There are thirty-two (32) Electrical Switches on Clemson University properties with a capacity of greater than 55 gallons of non-PCB oil. The great majority of these are found in access tunnels and manholes within the central campus of the University. The total capacity of these switches is 3623 gallons. A list of these switches with GPS location may be found in Table 7h of this report. Daily throughput does not apply to Electrical Switches.

## **(5) Maximum Storage Capacity and Normal Daily Throughput (cont.)**

### **ELECTRICAL TURBINES**

- There are two (2) turbines located at the Central Energy Facility off of Klugh Avenue on the main campus of Clemson University with a total fuel capacity of 400 and 160 gallons respectively. Daily throughput is negligible. A complete list of these turbines with GPS location may be found in Table 7i of this report.

### **ELECTRICAL TRANSFORMERS**

A complete listing of all transformers on Clemson University properties (including those having less than 55 gallons of capacity) is available from University Facilities, and is found in Table 9d of this report. A complete list of transformers with a capacity of >55 gallons may be found in table 7j of this report. Daily throughput does not apply to transformers.

- There are ten (10) transformers located at a storage facility West of the main campus on Hugo Road in Seneca, SC that have a capacity of more than 55 gallons of non-PCB oil. The total capacity of these transformers is 1519 gallons. These transformers are not currently in use and qualify for inclusion of the plan in accordance with 40 CFR 112.7. A listing of these transformers with GPS location is found in Table 7j of this report.
- There are one hundred thirty six (136) transformers in current usage on the University campus and proximal university properties that have a capacity of more than 55 gallons of non-PCB oil. The volume of oil in each transformer varies, and a complete listing with GPS location of each is found in Table 7j of this report. The majority of these transformers are maintained and owned by Clemson University, but a number of them are owned by Duke Power (Table 8b) and the Blue Ridge Electrical Cooperative (Table 8c). The total volume of transformers meeting the 55 gallon criteria for purposes of this report is greater than 42,003 gallons.
- The uncertainty about total capacity of transformers is due to certain Duke Power transformers where it can be visually confirmed that the capacity is greater than 55 gallons, but exact capacity cannot be verified because the transformers cannot be accessed by Clemson University. Several attempts were made by Clemson to obtain these capacities, but all proved to be unsuccessful. In all cases where exact capacity is unknown, a level of greater than 55 gallons is assigned until further notice by Duke Power. A breakdown of these transformers by ownership is as follows:

**Clemson University** - 26,605 gallons capacity

**Blue Ridge Electrical Cooperative** - 661 gallons capacity

**Duke Power** - 13,967 gallons known capacity; > 770 gallons assigned capacity.

## **(5) MAXIMUM STORAGE CAPACITY AND NORMAL DAILY THROUGHPUT (CONT.)**

### **WASTE OIL TANKS**

- There are four (4) 250 gallon Waste Oil Collection containers located throughout the main campus (Motor Pool (2), Athletics Maintenance Shed and Recycling Center). There is one 500 gallon Waste Oil Collection container in the Landscape / Maintenance area. Daily throughput is negligible.
- There are three (3) Waste Oil collection containers located off the main campus. One is located at the Forestry Field Services location at Hugo Road, and has a capacity of 250 gallons. Another is located at the Golf Course Maintenance Center off of Perimeter Road, and has a capacity of 250 gallons. The third is located at the Simpson Research Center on Lebanon Road in Pendleton, SC, and has a capacity of 1000 gallons. The total volume of all large Waste Oil collection containers is 3000 gallons, and a complete listing with GPS location can be found in Table 7k of this report.

### **MISCELLANEOUS CONTAINERS**

- The remaining oil stored on the University campus is either #2 diesel fuel oil or gasoline that is contained in tanks ranging from 5 to 50 gallons day that supply the fuel for small emergency generators, 1 quart to 30 gallon tanks of oil related products as needed for maintenance of vehicles or machinery, or oil stored in transformers that are smaller than 55 gallons in capacity. All remaining containers are aboveground. The capacity of all small containers combined throughout the Clemson University properties is thought to be greater than 4000 gallons, but no precise amount can be obtained that would be accurate for anything over a very short period of time.

### **ABANDONED TANKS**

- There are a number of tanks located throughout University properties that may or may not be empty, but have potential to contain oil based product. Many tanks listed above may also contain little or no product, but this cannot be ascertained at present. A list follows below, and is essentially similar to that in Table 4c:

|                             |             |
|-----------------------------|-------------|
| Earle Hall (propane)        | 250 gallon  |
| Hydraulic Lab (propane)     | 500 gallon  |
| Recycling Center (fuel oil) | 550 gallon  |
| Maintenance (fuel oil)      | 1000 gallon |
| Old Insectory (fuel oil)    | 280 gallon  |
| Old Insectory (fuel oil)    | 1000 gallon |

**(5) Maximum Storage Capacity and Normal Daily Throughput (cont.)**

|  |             |
|--|-------------|
| Dillard Building (PERC tank)                         | 2000 gallon |
| West Campus Transformer #4<br>(Serial # UBI2677-001) | 424 gallon  |
| Walker Golf Course UST (unknown)                     | >55 gallon  |

**STORAGE CAPACITIES**

The storage capacities of all Clemson University properties are as follows:

Underground Capacity (not including propane) 63,880 gallons, plus >55 of unknown capacity.

Above Ground Capacity (not including propane) 121,231 gallons, plus >825 gallons of unknown capacity.

The capacities of all Clemson University properties that are covered by all requirements of the SPCC plan are as follows:

Underground Storage Capacity (SPCC covered) 63,880 gallons, plus >55 of unknown capacity.

Above Ground Storage Capacity (SPCC covered) 70,605 gallons, plus >55 of unknown capacity.

A note about capacities (particularly hydraulic tanks) - if the capacity of any square or rectangular storage container could not be ascertained from records, stamped identification tags or the manufacturer, and it was accessible and the tank could be measured with a high degree of confidence, capacities were estimated by measurement of the length, width, and height of the tank (inches) and divided by 231 to obtain the capacity in gallons. In all cases where this was done, the estimated capacity would be equal to or slightly greater than an actual capacity.

**(6) Facility Description**

The Clemson University main campus is a public educational and research institution consisting of several buildings situated on 900 acres in Southwestern Pickens County. The site is bordered by Lake Hartwell on two sides, and the City of Clemson on two sides.

There are walkways connecting the buildings to each other, and a large underground tunnel system for the distribution of utilities. The primary power service for the entire campus is electrical, with emergency generators located in all buildings to provide backup power in case of a loss of electrical power from Duke Power.

In addition to the main campus, there are many properties owned by Clemson University for research, academic, and agricultural purposes that are located away from the main campus. These properties are located in Pickens, Oconee, and Anderson Counties in the Northwestern corner of the state. Descriptions of primary and secondary power sources to these buildings are similar to those described for the main campus.

The SPCC Plan covers all above ground fuel tanks and drums, bulk tanks and day tanks that supply the emergency generators, waste oil collection tanks and drums, waste cooking oil collection containers, heating oil tanks, the gasoline, diesel and jet fuel UST's, hydraulic tanks for the elevators, electrical switches, transformers and all associated piping.

**(7) Cause of Spill**

This facility has not discharged more than 1,000 gallons of oil onto or upon the navigable waters of the United States or adjoining shorelines in a single spill event. This facility has not discharged oil in harmful quantities, as defined in 40 CFR Part 110, into or upon navigable waters of the United States or adjoining shorelines in two spill events, reportable under Section 311(b) of the FWPCA, occurring within any twelve month period.

**(8) Corrective Action Taken for Spill**

Not applicable.

**(9) Additional Measures to Minimize Recurrence**

Not applicable.

**(10) Other Required Information**

Not applicable.

## Spill Prevention Control and Countermeasure Plan

The following is the SPCC Plan prepared in accordance with 40 CFR 112.7. For simplicity and easy reference to the EPA rules and regulations, the numbering system associated with this plan is the same as that for Guidelines shown in 40 CFR 112.7.

### (a) Spill Events

This facility has not experienced a spill event as defined by 40 CFR 112.2.

### (b) Spill Potential and Direction of Flow

There are sources at the Clemson campus that have a reasonable potential for a failure that could result in a spill event. They include all waste cooking oil containers, oil or fuel containing drums, underground gasoline, jet fuel, and diesel fuel tanks, all above ground gasoline, diesel, and kerosene tanks, all fuel storage tanks, day tanks systems that supply the emergency generators and fire pumps, heating and fuel oil tanks, hydraulic tanks, switches, turbines, transformers, waste oil collection tanks and drums, and all associated piping.

- i) Waste cooking oil tanks with capacity greater than 55 gallons are located near the loading docks adjacent to food service areas throughout campus. These tanks are to be placed in containment sufficient to hold 110% of the entire contents of the container, or 20% of the total volume (whichever is greater) prior to October 17, 2003. The tanks are listed below. Please consult Table 7a in the Appendix for a complete description:

- **CLEMCOOK**
- **FERNCOOK**
- **HARCCOOK (3 containers)**
- **HENDCOOK**
- **HOPECOOK**
- **SCHLCOOK**
- **SEASCOOK**

- ii) 55 gallon drums containing oil based products are to be located in spill containment units capable of holding 110% of an one container, or 20% of total volume (whichever is greater). At this writing, the majority of the drum containment on Clemson University properties is inadequate, and must be updated to comply with this SPCC plan. Those drums that need to be placed in containment capable of holding the aforementioned amount by October 17, 2003 are listed below. Please consult Table 7b in the Appendix for a complete description:

**(b) Spill Potential and Direction of Flow (cont.)**

- **ATHDRUMS**
- **CEFDRUM2**
- **CEFDRUM3**
- **CFTDRUMS**
- **CHWATDM**
- **ECAMPDM1**
- **ECAMPDM2**
- **FIRETRAN**
- **FORBTDRM**
- **FORDRUMS**
- **GCMNTDM2**
- **GCMNTDM3**
- **GCMNTDRM**
- **MCAGRDM1**
- **MCAGRDM2**
- **MFDRUMS**
- **MNTDRUM1 (inadequate)**
- **MNTDRUM2**
- **MNTDRUM3**
- **MPDRUM1**
- **MPDRUM2 (1 of 2 total)**
- **MPDRUM3**
- **RAVDRUMS**
- **RECYDRUM**
- **SHPBNDM1**
- **SHPBNDM2**
- **SHPBNDM3**
- **SRBFXD3**
- **SRDRUMS**
- **STODRUMS**

**(b) Spill Potential and Direction of Flow (cont.)**

- **TRUCKDRM (1 of 2 total)**
- **WSTTRDRM**

iii) The USTs containing gasoline and diesel fuel at the Motor Pool and those containing jet fuel at the Oconee County Airport are piped a very short distance to the dispensing pumps for fueling vehicles. These systems are located just outside the respective areas noted. A major failure of a storage tank or associated piping would result in a flow of petroleum based fuel into the surrounding ground, which would then be reasonably expected to reach the local water table. From there, fuel could then reach the storm drains and thus to the old Seneca River and the waters of Lake Hartwell. The containment and diversionary measures in place for this system are discussed in the next section. Should a major failure go undetected, there is a potential for the release of the entire contents of an underground tank. Small amounts of fuel could enter the storm water system in the event of an above ground spill (during fueling for example).

The two 12,000 gallon fuel oil tanks located at the Central Energy Facility are double walled and were leak tested on site by the contractor at installation to 4 psi. The product lines were also tested to 200 psi. The tanks and lines have a leak detection system and alarm. The tanks are installed with a mechanical anti-siphon valve to prevent a big leak from the tanks should the lines ever be ruptured. The Steam Plant is staffed around the clock, and employees are trained to identify and respond to a leak. The site has spill countermeasures to clean up small spills that could most likely occur during filling the tanks.

Many petroleum containing AST's located throughout the Clemson University campus and outlying properties are contained within covered concrete structures that fully comply with all regulations found in 40 CFR 112.7(c). Two of these structures have a valve or plug that is either missing or not properly secured to prevent loss in case of a spill. These two areas are noted below:

- **MFFUELTK**
- **SRFUELTK**

Four petroleum containing AST's are located on trailers, and would not be within the scope of the SPCC plan, excepting that the trailers are in the same location greater than 90% of the time according to Clemson University employees. They would be considered inadequately contained if the containers were permanent, and are included below for the sake of completeness:

- **FORBTGAS**
- **PLFATTNK**
- **PLKERTNK**
- **SRBFDSL**

**(b) Spill Potential and Direction of Flow (cont.)**

Many other AST's are in locations that are inadequate, and must be placed in containment capable of holding 110% of the entire volume of the tank or 20% of the total volume (whichever is greater) by October 17, 2003. These tanks are listed below. Please consult Table 7c in the Appendix for a complete description of these, and all tanks described in this section (iii):

- **AGBIO1**
- **FORBTDSL**
- **FORDIESL**
- **FRMNDSTK**
- **GCMNTDS**
- **GCMNTGAS**
- **GCMNTGS2**
- **MCAGRTNK**
- **MNTABAN (abandoned)**
- **MPBLKSTO**
- **MPNAPTHL**
- **RECYFUEL (abandoned)**
- **RECYHT1**
- **RECYHT2**
- **SCFUELTK**

iv) Many day tanks supplying emergency generators are within mechanical rooms located throughout the campus. A failure of any one of these tanks, or the connected piping would first result in a flow of fuel onto the floor of the mechanical room. The maximum volume of spilled oil would be limited to the size of the day tank and would be contained in the mechanical room. Containment regulations pertaining to the SPCC plan are required of all non-propane generator fuel tanks with capacity greater than 55 gallons. There are currently thirteen (13) such tanks on Clemson University property. Newer generators may well be equipped with a double wall that may serve as an internal containment, but this could not be determined from visual inspection, and all tanks without adequate external containment assumed to be noncompliant with the SPCC pending further investigation. Those that need to be placed in containment capable of holding 110% of the entire volume of the tank or 20% of the total volume (whichever is greater) by October 17, 2003 are listed below. Please consult Table 7d in the Appendix for a complete description:

**(b) Spill Potential and Direction of Flow (cont.)**

- ***GNAGBIO***
- ***GNCLMHSE***
- ***GNCNENER***
- ***GNESEE***
- ***GNFIKE***
- ***GNFISHRY***
- ***GNHENDRX***
- ***GNTIWET***
- ***GNWCAMP***

v) The USTs containing fuel / heating oil at the Douthit Hills housing complex, as well as those found in a few other areas on Clemson University properties are piped a very short distance to the oil fired furnace within each individual structure. A major failure of a storage tank or associated piping would result in a flow of heating / fuel oil into the surrounding ground, which would then be reasonably expected to reach the local water table. From there, fuel could then reach the storm drains and thus to the old Seneca River and the waters of Lake Hartwell. The containment and diversionary measures in place for this system are discussed in the next section. Should a major failure go undetected, there is a potential for the release of the entire contents of an underground tank. Small amounts of fuel could enter the storm water system in the event of an above ground spill (during filling for example).

vi) All hydraulic tanks used in Clemson University property elevator systems are within mechanical rooms located throughout the campus and adjoining properties. A failure of any one of these tanks, or the connected piping would first result in a flow of fuel onto the floor of the mechanical room. The maximum volume of spilled oil would be limited to the size of the day tank and would be contained in the mechanical room. These tanks are not subject to containment standards by virtue of being exempted from applicability under 40 CFR Part 112.1, and page(s) 47054-055 of the Oil Pollution Prevention and Response Final Rule dated July 17, 2002.

vii) All electrical switches are located within concrete lined utility tunnels located throughout the campus or in concrete lined manholes adjacent to areas of service. A failure of any one of these tanks associated with an electrical switch would first result in a flow of fuel onto the floor of the subterranean vault where it resides. The maximum volume of spilled oil would be limited to the size of the day tank and would be contained within this vault.

**(b) Spill Potential and Direction of Flow (cont.)**

These tanks are not subject to containment standards by virtue of being exempted from applicability under 40 CFR Part 112.1, and page(s) 47054-055 of the Oil Pollution Prevention and Response Final Rule dated July 17, 2002.

viii) The two (2) tanks utilized in the turbines located at the Clemson University Central Energy Facility are double walled and were leak tested on site by the contractor at installation to 4 psi. These tanks are not subject to containment standards by virtue of being exempted from applicability under 40 CFR Part 112.1, and page(s) 47054-055 of the Oil Pollution Prevention and Response Final Rule dated July 17, 2002.

ix) Most of the currently active oil filled transformers located throughout the campus are contained within concrete vaults. A failure of any of the transformers would result in a spill of non-PCB oil onto the floor of the vault. The containment and diversionary measures in place for the transformers are discussed in the next section. The maximum volume of spilled oil would be limited to the volume contained within each transformer. Containment regulations pertaining to the SPCC plan are required for all transformers with capacity greater than 55 gallons that are not actively involved in the generation of electricity. There are currently eleven (11) such transformers on Clemson University property. Those that need to be placed in containment capable of holding 110% of the entire volume of any transformer, or 20% of the total volume (whichever is greater) by November 17, 2003 are listed below. Please consult Table 7j in the Appendix for a complete description:

- ***RVST1***
- ***RVST2***
- ***RVST3***
- ***RVST4***
- ***RVST5***
- ***RVST6***
- ***RVST7***
- ***RVST8***
- ***RVST9***
- ***RVST10***
- ***WCAMPUS4***

## **(b) Spill Potential and Direction of Flow (cont.)**

x) Most waste oil collection tanks are located in spill containment units, which are capable of holding 110% of the entire volume of this tank. Those that need to be placed in containment capable of holding this volume, or in the case of multiple tanks, 20% of the total volume (whichever is greater) by October 17, 2003 are listed below. Please consult Table 7k in the Appendix for a complete description:

- ***ATHWSTOIL***
- ***FORWSOIL***
- ***GCMNTOIL***
- ***SRWSTOIL***

Overall facility drainage on the main campus of Clemson University follows the topographical elevation of the ground surface that lead to storm drains that collect and discharge stormwater into either the Old Seneca River (which is pumped into Lake Hartwell by the Corps of Engineers), various tributaries of Hunnicutt Creek (which is also pumped into Lake Hartwell) or directly into Lake Hartwell itself.

The majority of off campus agricultural locations are located within ½ mile of Lake Hartwell, and there are numerous storm drains in the area that lead toward the lake or a small tributary leading in that direction. Those locations in Pendleton or near South Carolina Route 187 (Wild Hog Road) have storm drains leading to small creeks and tributaries feeding either Hunnicutt Creek or other associated creeks that terminate at Lake Hartwell.

## **(c) Containment and/or Diversionary Structures**

The USTs at the Motor Pool were installed in December 1999, and include all the modern accessories to limit the chance of undetected leak or spill event. The tanks were designed and installed per all governing codes and regulations. The tanks are UL listed, double wall steel tanks, complete with leak detection and overfill protection. The short run of underground piping between the tanks and the dispensing pumps is a double wall containment piping system. The materials of construction of the tank and associated piping are both sufficiently impervious to contain spilled gasoline.

The 250 gallon waste oil collection tanks and other oil containing fuel tanks on Clemson University properties (save for those exceptions noted) are located inside spill containment sufficient to contain the entire volume of the tank. Exceptions will be placed in proper containment by October 17, 2003.

Most currently active oil filled transformers at the Clemson campus are installed within concrete vaults that provide containment in the case of a spill event. There are no floor drains within the transformer vaults. The concrete construction of the transformer vaults are sufficiently impervious to contain spilled oil. Exceptions are generally on isolated concrete pads near areas of service, and any breach of internal containment and / or discovery of a leak would be subject to all spill reporting in the Notification Procedures section of this document.

Most day tanks that supply fuel for the emergency generators are located within mechanical rooms. In some cases, a sill has been installed across the door opening to provide containment within the room, in other cases, the sill is actually a foundation wall that provides several feet of containment height. In mechanical rooms where no sill is provided, the floor is sloped away from the doorway and the floor area is large enough that the room itself would contain the volume of fuel stored in the event of a spill. There are floor drains in the mechanical rooms; these drains discharge to the Clemson University sanitary sewer system and thus to the Clemson waste water treatment plant, which allows the condition of the accumulation to be examined for the presence of oil prior to discharge. The concrete floors of all the mechanical rooms are sufficiently impervious to contain spilled oil.

In addition to the containment and diversionary structures described above, absorbent materials are on hand and readily available to contain and remove minor spills.

Exceptions are detailed in Section (b) iv of this report, and all such exceptions are to be placed in adequate containment by October 17, 2003, as stated in that section. In the interim, breach of internal containment and / or discovery of a leak would be subject to all spill reporting in the Notification Procedures section of this document.

#### **(d) Contingency Plan**

Because the installation of the structures and equipment described above is designed to prevent discharged oil from reaching navigable waters, and without exception all tanks / drums that are not in current compliance with containment regulations found in 40 CFR 112.7(c) are to be corrected by the enforcement date of this plan, a contingency plan is not required. However, Clemson University Environmental Health and Safety has developed Emergency Procedures/Spill Response and Notification Procedures in the event of a spill of any hazardous material. These two documents are included.

#### **(e) Other Spill Prevention and Containment Procedures**

Not applicable

#### **(1) Facility Drainage**

- i) There are no "valves" located on any of the containment structures other than the two described earlier in Section (a) iii) of this SPCC plan, however, there are floor drains in all the mechanical rooms that are designed to handle a leak. The mechanical areas located throughout the campus drain to the sanitary sewer and thus to the Clemson waste water treatment plant, which allows the condition of the accumulation to be examined for the presence of oil prior to discharge.
- ii) There are no valves used for the drainage of diked areas at the main campus, and only two overall in proximal areas.
- iii) There are no engineered plant drainage systems from undiked areas of the facility

- iv) There are no in plant drainage ditches that can be equipped with a diversion system. This technique does not apply to the Clemson campus or outlying property conditions.
- v) The drainage waters from the facility are not treated by any means that require pumping systems, and the existing systems in place for handling drainage from the parking and service **garages are adequately engineered to prevent oil from reaching navigable waters.**

## **(2) Bulk Storage Tanks**

- i) The material and construction of all bulk storage tanks and day tanks is compatible with the material stored and the conditions of storage, such as pressure and temperature. This statement also applies to the gasoline/diesel USTs and the 250 gallon waste oil tanks.
- ii) The installation of concrete sills, foundation walls and the physical characteristics of the mechanical rooms and 250 gallon waste oil tanks themselves provide a secondary means of containment that will handle the entire contents of bulk tanks. There is no requirement to provide sufficient freeboard for precipitation because every bulk tank is protected from the elements. The floor of the mechanical rooms are sufficiently impervious to contain spilled oil.
- iii) All the bulk tanks that are in proper containment are located under cover, so there is no need to drain rainwater from any containment area. Tanks improperly contained at the time of this writing are to be covered and thus sheltered from accumulation so that drainage is unnecessary.
- iv) The Motor Pool and Oconee County Airport USTs are the only buried metallic storage tanks on Clemson University properties. These tanks are protected from corrosion by cathodic protection that is compatible with the local soil conditions, and are regularly pressure tested.
- v) There are no partially buried metallic tanks on the Clemson University campus or surrounding properties.
- vi) The bulk storage tanks, day tanks, waste oil accumulation drums, tank supports, containment sills, and the pumps and piping systems are all visually inspected at least once a quarter by independent environmental personnel for signs of deterioration and / or leaks. Any accumulation of oil within the containment area; on the floor of the mechanical rooms; or adjacent to any tank containing an oil based product is also noted during inspection. The inspection of those tanks in mechanical rooms is performed during weekly testing of the emergency generators. All other inspections are performed on a quarterly basis, or more often in cases where work has been performed on any tank(s) regulated by this plan. A sample Inspection Form is included in Appendix C. Completed forms are kept on file at the facility.

## **(2) Bulk Storage Tanks (cont.)**

- vii) Test integrity of all bulk storage containers, tank supports, and foundation will be performed at least every ten (10) years, or when material repairs are made. Visual testing will be combined with either hydrostatic testing, radiographic testing, ultrasonic testing or acoustic emissions testing so that tanks meet either API Standard 653 ("Tank Inspection, Repair, Alteration, and Reconstruction") or Steel Tank Institute SP001-03. Comparison records are to kept on file at the facility.
- vii) There are no internal heating coils inside any of the tanks.
- viii) The bulk fuel oil tanks are equipped with an audible air vent to alert the delivery person of a full tank during filling operations. The bulk tanks are also equipped with visual tank level gauges.
- ix) There are no disposal facilities that discharge plant effluents into navigable waters on the Clemson campus.
- x) The tank seams, gaskets, flanges and bolting are visually inspected for leaks in the aforementioned time frames by independent environmental, or facility personnel. Any leak which results in the accumulation of oil is promptly corrected. A sample of the Inspection Form is included in Appendix C. Completed forms are kept on file at the facility.
- iii) There are no portable or mobile storage tanks at the main campus facility. Those located at the Agricultural locations outside of the University are stored in locations designated for that purpose, and remain in these areas over 90% of the time. The portable generator located at the Simpson Research Center in Pendleton is double walled so that a leak within the main tank is self-contained.

## **(3) Drums**

- i) The material and construction of all 55 gallon drums is compatible with the material stored and the conditions of storage, such as pressure and temperature.
- ii) The installation of concrete sills, foundation walls and the physical characteristics of the mechanical rooms – where they exist - provide a secondary means of containment that will handle 110% of the entire contents of a drum, or 20% of the total volume. There is no requirement to provide sufficient freeboard for precipitation where drums protected from the elements, and this is true in almost every instance noted. Where this is not the case, Clemson University will either provide shelter from precipitation or will move the drums to properly contained storage by November 17, 2003. Where present, the floor of the mechanical rooms and concrete drum storage areas are sufficiently impervious to contain spilled oil.

- iii) All drums in proper containment are located under cover, so there is no need to drain rainwater from any containment area. Drums improperly contained at the time of this writing are to be covered and thus sheltered from accumulation so that drainage is unnecessary.
- iv) All drums, and any dispensing pumps and piping systems are all visually inspected at least once a quarter by independent environmental personnel for signs of deterioration, leaks which might cause a spill and accumulation of oil. This inspection is performed during. A sample Inspection Form is included in Appendix C. Completed forms are kept on file at the facility.
- v) There are no internal heating coils inside any of the drums.
- vi) All 55 gallon drums are equipped with a vent bung hole that is opened during any discharge of material to prevent accidental spillage.
- vii) There are no disposal facilities that discharge plant effluents into navigable waters on the Clemson campus.
- viii) The drum seams, gaskets, flanges and bung holes are visually inspected for leaks once a quarter by independent environmental personnel. Any leak which results in the accumulation of oil is promptly corrected. A sample of the Inspection Form is included in Appendix C. Completed forms are kept on file at the facility.

#### **(4) Facility Transfer Operation, Pumping and In-Plant Process**

- i) The small portion of piping that is underground between the Motor Pool and Oconee County Airport USTs and the dispensing pumps are the only underground piping covered by this SPCC Plan. The sections of pipe are a double wall containment piping system. Cathodic protection is not required as the primary piping is not in direct contact with the soil.
- ii) None of the piping at these facilities is out of service or in standby service.
- iii) The existing pipe supports are adequately designed to minimize abrasion and corrosion and to allow for expansion and contraction.
- iv) All valves and piping are visually inspected at least once a quarter by independent environmental or facility personnel. A sample of the Inspection Form is included in Appendix C. Completed forms are kept on file at the facility.
- v) Vehicular traffic granted entry into the facility is warned by appropriate signage to be sure that they will not endanger the portions of the aboveground piping where such a danger exists.

#### **(5) Tank Truck Unloading Procedures**

- i) Tank truck unloading procedures meet the minimum requirements and regulations established by the Department of Transportation. In particular, the following procedures are observed during the filling of the bulk/day tanks and the Motor Pool USTs:

1. No smoking is allowed while unloading #2 fuel oil, gasoline, or kerosene.
  2. Delivery truck driver is to remain with the vehicle at all times while loading/unloading.
  3. Each delivery of oil or gasoline will be supervised by the delivery truck driver and a competent Clemson employee. Throughout the process, each person must be alert, have unobstructed view of the delivery truck and the storage tank, as well as being within 25 feet of each. Unless the engine is to be used for operation of the pump, no flammable liquid shall be unloaded while the engine is running.
  4. The facility representative will ensure that the wheels of the delivery truck are blocked and that drip pans or oil absorbing pads are placed beneath all hose connections that might be prone to leakage.
  5. Unloading operations are to be performed only in areas designated for that purpose.
  6. The unloading operation is not to begin before the level in the tank is checked and it is verified that the tank has sufficient volume available to receive the volume of fuel to be transferred.
  7. The drain valve on the truck is to be closed, and the unloading line is to be drained back to the tank before disconnecting the unloading line.
  8. Prior to departure of the delivery truck, the lower most drain and all outlets are closely examined for leakage, and if necessary, tightened, adjusted or replaced to prevent any liquid leakage while in transit.
  9. Immediately report any leakage or spillage, including quantity, to Clemson University Public Safety, 911 or 656-2222.
- ii) There is currently no containment system in place to protect the fuel delivery truck during unloading operations. A release could occur at this location during offloading due to a tank truck structural failure, equipment failure (high level or vent alarms) or human error. The delivery truck is equipped with means to allow the delivery truck driver to immediately stop the transfer operation in the event of a spill or leak. Due to the few number of fuel deliveries to the campus, a containment system dedicated to this operation at each location is not warranted. The unloading procedures as detailed above, especially the presence of a second person other than the delivery truck driver, is taking adequate precaution to prevent a spill event during unloading.
- iii) Clemson University personnel observing all fuel tank unloading are to have proper spill control apparatus, a list of contact numbers in case of a spill, and a working cell phone available at all times.
- iv) Warning signs are posted in the delivery truck unloading areas to prevent vehicular departure before the complete disconnection of flexible or fixed transfer lines.

- v) Tank cars and tank trucks are not filled from this facility. For precautions during offloading of delivery trucks, please refer to i) above.

#### **(6) Oil Production Facilities**

Not applicable.

#### **(7) Oil Drilling and Workover Facilities (Onshore)**

Not applicable.

#### **(8) Oil Drilling and Workover Facilities (Offshore)**

Not applicable.

#### **(9) Inspection and Records**

Once a quarter (or more often as warranted – see Section (2) vi) and (3) iv) above) a documented inspection is made and the Inspection Form (see Appendix C) is completed by qualified independent environmental and / or responsible facility personnel.

The inspection shall include all components of the system, including the bulk and day tanks, transformers, drums, containment areas, pumps and piping. The inspection includes a visual check for signs of leakage and/or apparent deterioration of the system components. The date of the inspection, a description of corrective action taken or proposed, and the projected completion date for required corrective action is to be recorded on the Inspection Form.

An inspection of any accumulated liquid within a containment area will be made to determine if manual drainage is necessary. If manual drainage is deemed necessary, all visual oil will be removed and the methods employed will be recorded on the Inspection Form.

In cases where accumulated liquid is seen in an area that is not currently in proper containment, all instances would be subject to spill reporting in the Notification Procedures section of this document.

All inspection records will be maintained on site for a period of at least three years.

At least every ten (10) years, or when material repairs are made, test integrity of all bulk storage containers, tank supports, and foundation will be performed at least every ten (10) years. Visual testing will be combined with either hydrostatic testing, radiographic testing, ultrasonic testing or acoustic emissions testing so that tanks meet either API Standard 653 (“Tank Inspection, Repair, Alteration, and Reconstruction”) or Steel Tank Institute SP001-03. Comparison records are to be kept on file at the facility.

## **(10) Security**

- i) Access to the Clemson campus and outlying properties is restricted to employees, students and visitors. The University Public Safety Office is operational 24-hours a day and its police officers and security staff provide regular patrols to insure the safety of personnel and University facilities including the oil storage areas. Direct access to all the aboveground tanks and drums is restricted to authorized Facilities, Administration, or other specially trained or authorized personnel.
- ii) There are no accessible master flow or drain valves that would permit direct outward flow of the bulk tank contents to the surface.
- iii) All regulated containers throughout this facility are located inside rooms or within gated and / or locked areas accessible only to authorized personnel.
- iv) All piping and connections at this facility are in service, and should not be capped or blank flanged.
- v) The facility lighting is commensurate with the type and location of each facility. It is sufficiently lit to enable the discovery of spills during hours of darkness, both by operating personnel and by non-operating personnel, and is sufficiently lit to prevent spills occurring through acts of vandalism.

## **(11) Personnel, Training and Spill Prevention Procedures**

- i) The owners of this facility have properly instructed their personnel in the operation and maintenance of equipment to prevent the discharge of oil, and applicable pollution control laws, rules and regulations.
- ii) W. Robert Newberry, IV CIH, CHMM is the designated person who is accountable for oil spill prevention and reports to the Chief Business Officer, Scott Ludlow. Mr. Newberry is the Director of Environmental Health and Safety for Clemson.
- iii) University personnel with responsibilities for compliance with the requirements of this Plan participate in periodic training that teaches employees to perform their duties in a way to prevent the discharge of harmful quantities of oil or hazardous substances. This training includes familiarization with this Plan, emergency response procedures, PPE, mechanical systems and Material Safety Data Sheets (MSDS) for the products they are likely to come in contact with. This training is also intended to make the operational personnel aware of known spill events or failures, malfunctioning components and any recently developed precautionary measures.

A written agenda and attendance sheet is kept on file for each training session, unless the training is obtained via the World Wide Web. In that event, trainees enter their information directly into a database. New personnel will be instructed, as appropriate, within a reasonable time after entering the site. Contractors and other transient personnel will be advised of applicable spill prevention measures upon entering the site, as appropriate.

## Emergency Procedures/Spill Response

US EPA regulations define a spill as the discharge of oil into, or upon the navigable waters of the United States or adjoining shorelines, in harmful quantities. Harmful quantities are defined as a discharge that violates applicable water quality standards or causes a sheen upon, or discoloration of, the surface water or the adjoining shorelines. Contaminated groundwater may also have the potential to seep, leach or flow into navigable waters that would be included in this definition. Storm sewers are considered to fall under the definition of a navigable waterway.

An important goal of an effective emergency response procedure during an oil or hazardous substance release incident is to keep the material separated from water to minimize migration and the resulting potential increase to human health and environmental exposure. Every effort should be made to prevent spills and emphasize substance containment at the source rather than resort to separation of the material from expanded portions of the environment or downstream water.

The following section outlines the Emergency Procedures in place should a release of oil or hazardous substances occur at the main campus.

### (1) Discovery of a Release

The person discovering a release of material from a container, tank or operating equipment should initiate certain actions immediately, including:

- i) Extinguish any sources of ignition. Until the material is identified as non-flammable and non-combustible, all potential sources of ignition in the area should be turned off. If the ignition source is stationary, attempt to move spilled material away from ignition source. Avoid sparks and movement creating static electricity.
- ii) Identify the material released. Consult MSDS' which provide the information for proper identification of the characteristics of the released material. MSDS' for materials stored in containers greater than 55 gallons are under separate cover, and are available for viewing at the EHS office on North Palmetto Boulevard. If there is an emergency, all MSDS currently in use on Clemson University properties can be quickly accessed on the Internet at <http://ehs.clemson.edu> by clicking on the link "Material Safety Data Sheets on the Web". If Internet access is unavailable, all inquiries would be subject to spill reporting in the Notification Procedures section of this document.
- iii) Attempt to stop the release at its source. Assure that no danger to human health exists first. Simple procedures (turning valves, plugging leaks, etc.) may be attempted by the discoverer if there are no health or safety hazards and there is reasonable certainty of the origin of the leak.

- iv) Initiate spill notification and reporting procedures. Report the incident immediately to Clemson Public Safety at 911 or 656-2222. If there is an immediate threat to human life (e.g., a fire in progress or fumes overcoming workers), an alarm should be sounded to evacuate the building, which will initiate Clemson University Fire Department response.

Request the assistance of the Clemson Fire Department's Hazmat Response Team if an uncontrolled spill has occurred and/or if a spill has migrated beyond the site boundaries. Notification Procedures are contained in the following Section 5.

## **(2) Containment of a Release**

If material is released outside a containment area, it is crucial that the material be contained as quickly as possible. Action to be conducted may include:

- i) Attempt to stop the release at the source. If the source of the release has not been found; if special protective equipment is necessary to approach the release area, or if assistance is required to stop the release, a Clemson Fire Department response should be initiated by contacting the Public Safety Office at 911 or 656-2222. Clemson University Public Safety will then notify EHS who will, in turn, notify the appropriate departments or agencies. Clemson EHS personnel should be present to help guide Clemson Fire Department efforts.
- ii) Contain the material released into the environment. Following proper safety procedures, the spill should be contained by absorbent materials and dikes using shovels and brooms. Consult applicable MSDS' found in the appending document to this plan for material compatibility and environmental precautions.
- iii) Recover or clean up the material spilled. As much material as possible should be recovered and reused where appropriate. Material which cannot be reused must be discarded as South Carolina-regulated hazardous waste. Liquids absorbed by solid materials shall be shoveled into open top drums, or if size warrants, into a roll-off container. When drums are filled after a cleanup, the drum lids shall be secured and the drums shall be appropriately labeled using the appropriate State of South Carolina hazardous waste label identifying the contents, the date of the spill/cleanup, the site name and location and the words "hazardous waste." Combining non-compatible materials can cause potentially dangerous chemical and/or physical reactions or may severely limit disposal options. Compatibility information can be found on the MSDS' located in Appendix D.
- iv) Cleanup of the spill area. Surfaces that are contaminated by the release shall be cleaned using an appropriate substance or water. Cleanup water must be minimized, contained and properly disposed of. Occasionally, porous materials (e.g., wood, soil or oil-dry) may be contaminated, such material will require special handling for disposal.
- v) Decontaminate tools and equipment used in cleanup. Even if dedicated to cleanup efforts, tools and equipment that have been used must be decontaminated before replacing them in the spill control kit.

- vi) Notification and reports to outside agencies. The EHS Director shall determine if a reportable spill has occurred and shall make the necessary notifications. Verbal notification to government agencies and emergency planning committees shall be executed, if necessary. In all cases where verbal notification is given, a confirming written report shall be sent to the same entity.
- vii) Arrange for proper disposal of any waste material. The waste material from the cleanup must be characterized by the University's hazardous waste vendor in conjunction with the Environmental Compliance Officer (Phil Carroll). Representative sampling and analysis may be necessary to make this determination. The waste must be transported and disposed of in compliance with all applicable laws and regulations.
- viii) Review of the SPCC Plan. Appropriate personnel shall review spill response efforts, notification procedures and cleanup equipment usage to evaluate their adequacy during the episode. Where deficiencies are found, the Plan shall be revised and amended.

### **(3) Internal Reporting**

Spills that are regulated per this Plan must be reported; at a minimum, the report will document the following items:

- a) Date, time and duration of release;
- b) Type of incident;
- c) Materials involved;
- d) Extent of injuries (if any);
- e) Assessment of potential hazards;
- f) Recovered material;
- g) SPCC Plan discrepancies (if any); and
- h) Prevention plan for similar incidents.

### **(4) Spill, Fire and Safety Equipment**

Portable fire extinguishers located throughout the University are well marked, and are easily accessible. Records are kept on all fire equipment in service and regular testing is performed in accordance with established procedures.

The Clemson University Fire and EMS Service maintain a hazmat response vehicle equipped with all material necessary to contain and cleanup small to moderate spills.

Personnel: 14 hazmat technicians, 10 hazmat first responders. Limited mitigation capabilities to include basic leak control and diking. Response time 5 minutes.

Fire apparatus:

1 - 1500 gallon per minute pumpers

2 - 1750 gallon per minute combination pumper 100ft aerial ladder

1 - service truck

1 - combination service - haz-mat response truck with basic assortment of hand tools, absorbant, and leak stopping equipment.

1 – complete set of confined space rescue equipment

#### **(5) Liaison with Local Authorities**

Copies of this Plan will be submitted to the local fire department, police department, local hospital and spill control contractors as requested or needed by them. In addition, familiarization sessions will be held with the personnel from these organizations as deemed necessary. It is important that the personnel responding to an emergency are familiar with the chemicals used, the possibilities for release of hazardous materials and the location of fire equipment such as hydrants, stand pipes, etc.

#### **(6) Other Clemson Emergency Response Plans**

Clemson maintains a Contingency Plan for dealing with spills of hazardous materials and/or waste materials. Copies are available from EHS.

## Notification Procedures

In the event of an actual spill, the Clemson employee discovering the release will contact Clemson Public Safety (911) as soon as possible after the incident has occurred. Contact preference is in the order listed. If spill discharge to surface water is imminent, emergency agencies should be notified as described below:

### (1) Internal Reporting

| Name   | Telephone #  |
|--|--|
| Clemson Public Safety                            | 911 or 656-2222  |
| W. Robert Newberry, IV<br>EHS Director           | Office: 656-2583<br>Cell phone: 650-8150<br>Home: 654-2628 |
| Phil Carroll<br>Environmental Compliance Officer | Office: 656-1770<br>Cell Phone: 650-8157                   |
| University Facilities                            | 656-2186   |

### (2) Reporting to Outside Agencies

After the EHS Director has been notified, he/she will conduct reporting to outside agencies, if necessary. If a spill threatens to reach an off-site waterway, and the spill cannot be contained and recovered by Clemson personnel, then the following contacts shall be made by the Environmental Compliance Officer:

| Name  | Phone #        |
|---|----------------|
| SC DHEC   | 803-253-6488   |
| National Response Center  | (800) 424-8802 |
| US Environmental Protection Agency<br>(EPA) Emergency Response Number | (303) 293-1788 |

The following information shall be communicated when reporting to outside agencies:

- a) Name, title, telephone number and address of reporter;
- b) Name, telephone number and address of the site/spill;
- c) Time, type and amount of material involved;
- d) Extent of injuries/illnesses, if known;
- e) Possible hazards to human health and the environment;
- f) Any body of water involved;
- g) The cause of the accident/spill; and
- h) The action taken or proposed by the site personnel.

### (3) Emergency Reporting Contacts

Regulatory Contacts:

| Name   | Phone #        |
|--|----------------|
| SC DHEC  | 803-253-6488   |
| National Response Center   | (800) 424-8802 |
| US Environmental Protection Agency (EPA) Emergency Response Number | (303) 293-1788 |

Spill Clean-up Contractor:

JBR Environmental Services

**1-800-583-3019**

(Clemson University Contract Manager for this contract – Phil Carroll 656-1770)

Contact for containers owned by other concerns:

Duke Power (EHS Office) (704) 373-7894

**Blue Ridge Electrical Cooperative (800) 240-3400**

**Carolina By-Products (800) 849-2254**

## **APPENDIX A - MAPS**

**(Plot Plan and all major map systems available for viewing in the EHS)**

**Map 2 - Detail of Forestry Services / Botanical Gardens Area (SE10C)**

**Map 3 – Detail of South Carolina Route 187 Area container locations**

**Map 4 – Detail of Pendleton Area container locations**

**Map 5 – Detail of Camp Hope Area container locations**

**Map 6 – Detail of Garrison Arena container locations**

**Map 7 – Overhead Photograph of Oconee County Airport**

**Map 8 – Detail of Oconee County Airport**

## APPENDIX B – TABLES

**Legend (ALL TABLES)**

**Table 1 – Clemson University Oil Storage Containers (MASTER LIST)**

**Table 2 - Clemson University Oil Storage Containers (ALPHABETIZED LIST)**

**Table 3 - Clemson University Oil Storage Containers (LOCATION BY QUADRANT)**

**Table 4 - Clemson University Oil Storage Containers (STATUS)**

**Table 4a – Active Containers not subject to containment requirements**

**Table 4b – Storage Containers subject to containment requirements**

**Table 4c – Abandoned Containers**

**Table 5 – Underground Storage Tanks (UST)**

**Table 6 – Above Ground Storage Tanks (AST)**

**Table 7 - Clemson University Oil Storage Containers (TYPE)**

**Table 7a – Cooking Oil / Tallow Containers (55 gallon or greater capacity)**

**Table 7b – Drums (55 gallon or greater capacity)**

**Table 7c – Fuel Tanks (55 gallon or greater capacity)**

**Table 7d – Generator Tanks (55 gallon or greater capacity)**

**Table 7e – Heating Oil Tanks (55 gallon or greater capacity)**

**Table 7f – Hydraulic Tanks (55 gallon or greater capacity)**

**Table 7g – Propane Tanks (55 gallon or greater capacity)**

**Table 7h – Electrical Switch (55 gallon or greater capacity)**

**Table 7i – Turbine Tanks (55 gallon or greater capacity)**

**Table 7j – Electrical Transformers (55 gallon or greater capacity)**

**Table 7k – Waste / Used Oil Tanks (55 gallon or greater capacity)**

**Table 8 - Clemson University Oil Storage Containers (OWNERSHIP)**

**Table 8a – Containers owned by Clemson University**

**Table 8b – Containers owned by Duke Power**

**Table 8c – Containers owned by Blue Ridge Electrical Cooperative**

**Table 8d – Containers owned by Carolina By Products**

**Table 9 – CLEMSON UNIVERSITY LISTS / HANDOUTS**

**Table 9a – Clemson University Building Generator List (University Facilities)**

**Table 9b – Clemson University Waste Cooking Oil Handouts**

**Table 9c – Clemson University Landscape Services Handout**

**Table 9d – Clemson University Transformer List (University Facilities)**

**Table 9e - Clemson University Elevator Listing (University Facilities)**

**Table 9f – Clemson University Douthit Hills Map and Tank Listing  
(University Housing)**

## **APPENDIX C - SAMPLE FORMS**

# Form 1 - Above Ground Storage Tank Inspection Form

Diesel p.m. run record

Day: \_\_\_\_\_

Date: \_\_\_\_\_

Bldg.: \_\_\_\_\_ unit: \_\_\_\_\_

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

Fuel level

Full

Low

Engine coolant level

Full

Low

Belts

Full

Low

Block heater

Full

Low

Battery cell level

Full

Low

Manual no load test: \_\_\_\_\_

Auto load test: \_\_\_\_\_

Voltage output: \_\_\_\_\_

Frequency: \_\_\_\_\_

Amps start: \_\_\_\_\_

Amps stop: \_\_\_\_\_

Hot oil pressure: \_\_\_\_\_

Hot coolant temperature: \_\_\_\_\_

Check if applicable:

Diesel storage tank

Visual ok

Diesel day storage tank

Visual ok

Waste oil drum

Closed

(if full have picked up)

Conditions:

Problems:

## Form 2 - Quarterly Waste Oil/ Fuel Tank Inspection Form

Inspector: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

Containers: \_\_\_\_\_

Identification Number / File Name: \_\_\_\_\_

### Condition:

- Closed
- Open
- Labeled
- Damaged
- Leaking

Notes:

### Access:

- Good
- Poor
- Clear
- Blocked

Notes:

Any sign of leaks or escape of oil from container? (Yes / No)

Containment adequate? (Yes / No)

Seams intact? (Yes/ No)

Exit ports / gaskets intact? (Yes / No)

Any bulges or dents? (Yes / No)

Contact made with Clemson EHS? (Yes / No / Not Applicable)

Notes:

### Form 3 - Quarterly Drum Inspection Form

Inspector: \_\_\_\_\_

Date: \_\_\_\_\_

Location: \_\_\_\_\_

Drum(s): \_\_\_\_\_

Identification Number / File Name: \_\_\_\_\_

Condition:

- Closed
- Open
- Labeled
- Damaged
- Leaking

Notes:

Access:

- Good
- Poor
- Clear
- Blocked

Notes:

Any sign of leaks or escape of oil from container? (Yes / No)

Containment adequate? (Yes / No)

Seams intact? (Yes / No)

Bungholes / gaskets intact? (Yes / No)

Any bulges or dents? (Yes / No)

Contact made with Clemson EHS? (Yes / No / Not Applicable)

Notes:



## APPENDIX D – PHOTOGRAPHS

## **APPENDIX E – CD**

**CD1) Clemson University container locations using Northing / Easting conversions**

**CD2) Clemson University Atlas AUTOCAD map**

**CD3) Photographs**

**CD4) Text of SPCC Plan / Report**

**CD5) Outlying facility maps + photographs**

**CD6) SPCC Charts**

| File Name | Description                              | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
| CLEMCOOK  | Clemson House Cooking Oil                | CK   | A           | 34° 40'53" N /<br>82° 50'01" W | 250               | 1                  | N/A        | SE6A     | CBP       | S      |
| FERNCOOK  | Fernow Street Café Waste Cooking Oil     | CK   | A           | 34° 40'36" N /<br>82° 50'17" W | 250               | 1                  | N/A        | SE5B     | CBP       | S      |
| HARCCOOK  | Harcombe Dining Hall Waste Cooking Oil   | CK   | A           | 34° 40'49" N /<br>82° 50'18" W | 250               | 3                  | N/A        | SE5A     | CBP       | S      |
| HENDCOOK  | Hendrix Student Center Waste Cooking Oil | CK   | A           | 34° 40'34" N /<br>82° 49'58" W | 250               | 1                  | N/A        | SE6B     | CBP       | S      |
| HOPECOOK  | Camp Hope Cooking Oil (Kresge Hall)      | CK   | A           | 34° 37'16" N /<br>82° 50'49" W | 250               | 1                  | N/A        | N/A      | CBP       | S      |
| SCHLCOOK  | Schilleter Dining Hall Waste Cooking Oil | CK   | A           | 34° 40'36" N /<br>82° 49'58" W | 250               | 1                  | N/A        | SE6B     | CBP       | S      |
| SEASCOOK  | Seasons Restaurant Cooking Oil           | CK   | A           | 34° 39'58" N /<br>82° 50'37" W | 250               | 1                  | N/A        | SE3E     | CBP       | S      |
| ATHDRUMS  | Athletic Department Oil Drums            | DM   | A           | 34° 40'20" N /<br>82° 51'07" W | 55                | 3                  | N/A        | SE1C     | CU        | S      |
| CEFDROM2  | Central Energy Facility Jet Fuel Drums   | DM   | A           | 34° 40'46" N /<br>82° 50'26" W | 55                | 4                  | N/A        | SE4A     | CU        | S      |
| CEFDROM3  | Central Energy Facility Oil Drums        | DM   | A           | 34° 40'45" N /<br>82° 50'26" W | 55                | 6                  | N/A        | SE4A     | CU        | S      |
| CEFDROMS  | Central Energy Facility Drums            | DM   | A           | 34° 40'46" N /<br>82° 50'28" W | 55                | 3                  | N/A        | SE4A     | CU        | S      |
| CFTRUMS   | Cherry Farm Shop Drums                   | DM   | A           | 34° 39'11" N /<br>82° 50'18" W | 55                | 7                  | N/A        | N/A      | CU        | S      |

| File Name | Description   | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |   |      |             |                                |                   |                    |            |          |           |        |
| CHWATDM   | Chilled Water Facility Drums (White Oil)                      | DM   | A           | 34° 40'24" N /<br>82° 50'04" W | 55                | 2                  | N/A        | SE6C     | CU        | S      |
| ECAMPDM1  | East Campus Central Energy Facility Drum (Oil) N              | DM   | A           | 34° 40'34" N /<br>82° 49'48" W | 55                | 1                  | N/A        | SE7B     | CU        | S      |
| ECAMPDM2  | East Campus Central Energy Facility Drum (Transmission Oil) S | DM   | A           | 34° 40'34" N /<br>82° 49'48" W | 55                | 1                  | N/A        | SE7B     | CU        | S      |
| FIREDRUM  | Fire Station Used Oil Drums                                   | DM   | A           | 34° 40'36" N /<br>82° 49'21" W | 55                | 2                  | N/A        | SE10B    | CU        | S      |
| FIRETRAN  | Fire Station Transmission Fluid Drum                          | DM   | A           | 34° 40'36" N /<br>82° 49'21" W | 55                | 1                  | N/A        | SE9B     | CU        | S      |
| FORBTDRM  | Forestry Botanical Gardsens Drum                              | DM   | A           | 34° 40'22" N /<br>82° 49'13" W | 55                | 1                  | N/A        | SE10C    | CU        | S      |
| FORDRUMS  | Forestry Field Services Drums                                 | DM   | A           | 34° 41'21" N /<br>82° 52'12" W | 55                | 2                  | N/A        | NW6B     | CU        | S      |
| GCMNTDM2  | Golf Course Maintenance Facility Hydraulic Oil Drum           | DM   | A           | 34° 40'14" N /<br>82° 50'12" W | 55                | 1                  | N/A        | SE5D     | CU        | S      |
| GCMNTDM3  | Golf Course Maintenance Facility Oil Drum                     | DM   | A           | 34° 40'13" N /<br>82° 50'12" W | 55                | 1                  | N/A        | SE5D     | CU        | S      |
| GCMNTDRM  | Golf Course Maintenance Facility Oil Drums                    | DM   | A           | 34° 40'14" N /<br>82° 50'12" W | 55                | 2                  | N/A        | SE5D     | CU        | S      |
| MCAGRDM1  | McAdams Hall Garage Drums (Waste Oil) N                       | DM   | A           | 34° 40'32" N /<br>82° 50'03" W | 55                | 5                  | N/A        | SE6B     | CU        | S      |
| MCAGRDM2  | McAdams Hall Garage Drums (Motor Oil) W                       | DM   | A           | 34° 40'32" N /<br>82° 50'03" W | 55                | 4                  | N/A        | SE6B     | CU        | S      |
| MFDRUMS   | Musser Fruit Farm Drums                                       | DM   | A           | 34° 36'08" N /<br>82° 52'45" W | 55                | 3                  | N/A        | N/A      | CU        | S      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial<br>#'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|---------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |               |          |           |        |
| MNTDRUM1  | Landscaping / Maintenance Drums #1                       | DM   | A           | 34° 40'17" N /<br>82° 50'24" W | 55                | 4                  | N/A           | SE4C     | CU        | S      |
| MNTDRUM2  | Landscaping / Maintenance Drums #2                       | DM   | A           | 34° 40'18" N /<br>82° 50'24" W | 55                | 1                  | N/A           | SE4C     | CU        | S      |
| MNTDRUM3  | Landscaping / Maintenance Drums #3                       | DM   | A           | 34° 40'18" N /<br>82° 50'24" W | 55                | 1                  | N/A           | SE4C     | CU        | S      |
| MPDRUM1   | Motor Pool Drums #1                                      | DM   | A           | 34° 40'50" N /<br>82° 50'26" W | 55                | 3                  | N/A           | SE4A     | CU        | S      |
| MPDRUM2   | Motor Pool Drums #2                                      | DM   | A           | 34° 40'50" N /<br>82° 50'26" W | 55                | 7                  | N/A           | SE4A     | CU        | S      |
| MPDRUM3   | Motor Pool Drums #3                                      | DM   | A           | 34° 40'49" N /<br>82° 50'27" W | 55                | 3                  | N/A           | SE4A     | CU        | S      |
| PNTDRUM   | Paint Shop Waste Drum                                    | DM   | A           | 34° 40'47" N /<br>82° 50'28" W | 55                | 1                  | N/A           | SE4A     | CU        | S      |
| RAVDRUMS  | Ravenal Center Drums                                     | DM   | A           | 34° 41'12" N /<br>82° 51'58" W | 55                | 3                  | N/A           | NW5A     | CU        | S      |
| RECYDRUM  | Recycling Center Waste Oil Drums                         | DM   | A           | 34° 40'43" N /<br>82° 49'16" W | 55                | 2                  | N/A           | SE10B    | CU        | S      |
| SHPBNDM1  | Old Sheep Barn Drum #1 (Transmission Oil) N              | DM   | A           | 34° 40'37" N /<br>82° 49'48" W | 55                | 1                  | N/A           | SE7B     | CU        | S      |
| SHPBNDM2  | Old Sheep Barn Drums #2 (Transmission / Worm Gear Oil) E | DM   | A           | 34° 40'37" N /<br>82° 49'48" W | 55                | 3                  | N/A           | SE7B     | CU        | S      |
| SHPBNDM3  | Old Sheep Barn Drum #3 (Transmission Oil) S              | DM   | A           | 34° 40'36" N /<br>82° 49'49" W | 55                | 1                  | N/A           | SE7B     | CU        | S      |
| SRBFXD3   | Simpson Research Beef Cattle XD-3 Drum                   | DM   | A           | 34° 38'52" N /<br>82° 43'41" W | 55                | 1                  | N/A           | N/A      | CU        | S      |
| SRDRUMS   | Simpson Research Center Drums                            | DM   | A           | 34° 37'23" N /<br>82° 43'33" W | 55                | 8                  | N/A           | N/A      | CU        | S      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quad-<br>rant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|---------------|-----------|--------|
|           |  |      |             |                                |                   |                    |            |               |           |        |
| STODRUMS  | Facilities Stores Drums  | DM   | A           | 34° 40'50" N /<br>82° 50'24" W | 55                | 9                  | N/A        | SE4A          | CU        | S      |
| TRUCKDRM  | Truck Maintenance Drums  | DM   | A           | 34° 40'49" N /<br>82° 50'28" W | 55                | 2                  | N/A        | SE4A          | CU        | S      |
| WSTTRDRM  | Waste Treatment Oil Drums  | DM   | A           | 34° 40'06" N /<br>82° 51'09" W | 55                | 3                  | N/A        | SW1D          | CU        | S      |
| AGBIO1    | Ag Biotech Building Diesel<br>Storage Tank                       | FT   | A           | 34° 40'26" N /<br>82° 49'55" W | 2000              | 1                  | N/A        | SE7C          | CU        | S      |
| AIRFUEL1  | Oconee County Airport<br>(Clemson Hangar) Jet Fuel<br>Tank #1    | FT   | U           | 34° 40'23" N /<br>82° 52'51" W | 12000             | 1                  | N/A        | N/A           | CU        | S      |
| AIRFUEL2  | Oconee County Airport<br>(Clemson Hangar) Jet Fuel<br>Tank #2    | FT   | U           | 34° 40'22" N /<br>82° 52'50" W | 12000             | 1                  | N/A        | N/A           | CU        | S      |
| CEFFUEL1  | Central Energy Facility Fuel<br>Oil Tank #1                      | FT   | A           | 34° 40'46" N /<br>82° 50'28" W | 12000             | 1                  | N/A        | SE4A          | CU        | S      |
| CEFFUEL2  | Central Energy Facility Fuel<br>Oil Tank #2                      | FT   | A           | 34° 40'46" N /<br>82° 50'28" W | 12000             | 1                  | N/A        | SE4A          | CU        | S      |
| CETLFUEL  | CETL Building Fuel Tank  | FT   | A           | 34° 35'06" N /<br>82° 49'09" W | 1000              | 1                  | N/A        | N/A           | CU        | S      |
| CFFUELTK  | Cherry Farm - Unleaded<br>Fuel Tank #1 and #2; Diesel<br>Tank #3 | FT   | A           | 34° 39'13" N /<br>82° 50'17" W | 2000              | 3                  | N/A        | N/A           | CU        | S      |
| DLFUELTK  | Dillard Building Fuel Tank                                       | FT   | A           | 34° 40'43" N /<br>82° 50'26" W | 2000              | 1                  | N/A        | SE4B          | CU        | X      |
| FORBTDLS  | Forestry Botanical Gardens<br>Diesel Tank                        | FT   | A           | 34° 40'25" N /<br>82° 48'59" W | 600               | 1                  | N/A        | SE11C         | CU        | S      |
| FORBTGAS  | Forestry Botanical Gardens<br>Unleaded Gasoline Tank             | FT   | A           | 34° 40'25" N /<br>82° 48'59" W | 150               | 1                  | N/A        | SE11C         | CU        | S      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |            |          |           |        |
| FORDIESL  | Forestry Field Services Diesel Fuel Tank #1 and #2                     | FT   | A           | 34° 41'20" N /<br>82° 52'14" W | 500               | 2                  | N/A        | NW6B     | CU        | S      |
| FRMNDSTK  | Freeman Hall Diesel Tank   | FT   | A           | 34° 40'34" N /<br>82° 50'15" W | 500               | 1                  | N/A        | SE5B     | CU        | S      |
| GCMNTDS   | Golf Course Maintenance Facility Diesel Fuel Tank                      | FT   | A           | 34° 40'13" N /<br>82° 50'11" W | 1000              | 1                  | N/A        | SE5D     | CU        | S      |
| GCMNTGAS  | Golf Course Maintenance Facility Unleaded Gasoline Tank #1             | FT   | A           | 34° 40'13" N /<br>82° 50'11" W | 1000              | 1                  | N/A        | SE5D     | CU        | S      |
| GCMNTGS2  | Golf Course Maintenance Facility Unleaded Gasoline Tank #2 (temporary) | FT   | A           | 34° 40'13" N /<br>82° 50'11" W | 550               | 1                  | N/A        | SE5D     | CU        | S      |
| GFUST     | Walker Golf Course Fuel Tank   | FT   | U           | 34° 40'10" N /<br>82° 50'27" W | >55               | 1                  | N/A        | SE4D     | CU        | X      |
| MCAGRTNK  | McAdams Hall Fuel Tank (SW)  | FT   | A           | 34° 40'31" N /<br>82° 50'03" W | 75                | 1                  | N/A        | SE6B     | CU        | S      |
| MFFUELTK  | Musser Fruit Farm Diesel Tank #1 and #2, Unleaded Gasoline Tank #3     | FT   | A           | 34° 36'09" N /<br>82° 52'45" W | 600/300/<br>300   | 3                  | N/A        | N/A      | CU        | S      |
| MNTABAN   | Landscaping / Maintenance Fuel Oil Tank                                | FT   | A           | 34° 40'16" N /<br>82° 50'23" W | 1000              | 1                  | N/A        | SE4C     | CU        | X      |
| MPBLKSTO  | Motor Pool Bulk Oil Storage  | FT   | A           | 34° 40'50" N /<br>82° 50'26" W | 500               | 1                  | N/A        | SE4A     | CU        | S      |
| MPNAPTHL  | Motor Pool Napthol Tank  | FT   | A           | 34° 40'50" N /<br>82° 50'26" W | 100               | 1                  | N/A        | SE4A     | CU        | S      |
| MPUSTDIE  | Motor Pool Diesel Tank   | FT   | U           | 34° 40'50" N /<br>82° 50'26" W | 3000              | 1                  | N/A        | SE4A     | CU        | S      |
| MPUSTGAS  | Motor Pool Gasoline Tank #1  | FT   | U           | 34° 40'50" N /<br>82° 50'26" W | 6000              | 1                  | N/A        | SE4A     | CU        | S      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |            |          |           |        |
| MPUSTGS2  | Motor Pool Gasoline Tank #2  | FT   | U           | 34° 40'50" N /<br>82° 50'26" W | 6000              | 1                  | N/A        | SE4A     | CU        | S      |
| MPUSTGS3  | Motor Pool Gasoline Tank #3  | FT   | U           | 34° 40'50" N /<br>82° 50'26" W | 2000              | 1                  | N/A        | SE4A     | CU        | S      |
| PLFATTNK  | Poultry Center - Feeding Fat Tank                                    | FT   | A           | 34° 39'23" N /<br>82° 50'10" W | 1000              | 1                  | N/A        | N/A      | CU        | S      |
| PLKERTNK  | Poultry Center - Kerosene Tank                                       | FT   | A           | 34° 39'24" N /<br>82° 50'10" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| RAVFUEL   | Ravenal Center Fuel Tank   | FT   | U           | 34° 41'11" N /<br>82° 51'55" W | 3000              | 1                  | N/A        | NW4A     | CU        | S      |
| RECYFUEL  | Recycling Center Fuel Oil  | FT   | A           | 34° 40'45" N /<br>82° 49'18" W | 550               | 1                  | N/A        | SE10B    | CU        | X      |
| RECYHT1   | Recycling Center Heating Unit Storage #1                             | FT   | A           | 34° 40'42" N /<br>82° 49'16" W | 190               | 1                  | N/A        | SE10B    | CU        | S      |
| RECYHT2   | Recycling Center Heating Unit Storage #2                             | FT   | A           | 34° 40'42" N /<br>82° 49'17" W | 190               | 1                  | N/A        | SE10B    | CU        | S      |
| SCFUELTK  | Starkey Center Diesel Fuel Tanks (W/E)                               | FT   | A           | 34° 38'44" N /<br>82° 48'58" W | 300/200           | 2                  | N/A        | N/A      | CU        | S      |
| SRBFDSL   | Simpson Research Beef Cattle Diesel Tank (trailer)                   | FT   | A           | 34° 38'51" N /<br>82° 43'40" W | 100               | 1                  | N/A        | N/A      | CU        | S      |
| SRFUELTK  | Simpson Research Center Unleaded Fuel Tank #1 and #2, Diesel Tank #3 | FT   | A           | 34° 37'23" N /<br>82° 43'32" W | 2000              | 3                  | N/A        | N/A      | CU        | S      |
| GNAGBIO   | Ag Biotech Building Generator  | GN   | A           | 34° 40'27" N /<br>82° 49'55" W | 1400              | 1                  | N/A        | SE7C     | CU        | S      |
| GNCLMHSE  | Clemson House Generator  | GN   | A           | 34° 40'50" N /<br>82° 50'01" W | 272               | 1                  | N/A        | SE6A     | CU        | S      |
| GNCNENER  | Central Energy Facility Generator                                    | GN   | A           | 34° 40'45" N /<br>82° 50'20" W | 700               | 1                  | N/A        | SE4A     | CU        | S      |

| File Name | Description   | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |   |      |             |                                |                   |                    |            |          |           |        |
| GNCPRDS   | Cooper Library Generator<br>(Diesel)                      | GN   | A           | 34° 40'35" N /<br>82° 50'11" W | 140               | 1                  | N/A        | SE5B     | CU        | S      |
| GNESEE    | ESE Building Generator Diesel<br>Storage Tank (Route 187) | GN   | A           | 34° 35'07" N /<br>82° 49'13" W | 250               | 1                  | N/A        | N/A      | CU        | S      |
| GNFIKE    | Fike Generator  | GN   | A           | 34° 40'49" N /<br>82° 50'29" W | 1000              | 1                  | N/A        | SE4A     | CU        | S      |
| GNFISHRY  | Fisheries Generator                                       | GN   | A           | 34° 40'11" N /<br>82° 50'44" W | 100               | 1                  | N/A        | SE3D     | CU        | S      |
| GNGODLEY  | Godley Snell Generator                                    | GN   | A           | 34° 40'19" N /<br>82° 49'56" W | 550               | 1                  | N/A        | SE7C     | CU        | S      |
| GNHENDRX  | Hendrix Student Center Gen-<br>erator                     | GN   | A           | 34° 40'34" N /<br>82° 49'58" W | 250               | 1                  | N/A        | SE6B     | CU        | S      |
| GNLITTLJ  | Littlejohn Coliseum Generator                             | GN   | A           | 34° 40'46" N /<br>82° 50'47" W | 700               | 1                  | N/A        | SE2A     | CU        | S      |
| GNMCADAM  | McAdams Hall Generator                                    | GN   | A           | 34° 40'29" N /<br>82° 50'05" W | 55                | 1                  | N/A        | SE6C     | CU        | S      |
| GNTIWET   | TIWET Building Generator<br>(Pendleton)                   | GN   | A           | 34° 38'23" N /<br>82° 46'24" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| GNWCAMP   | West Campus Housing Genera-<br>tor                        | GN   | A           | 34° 40'40" N /<br>82° 50'29" W | 75                | 1                  | N/A        | SE4B     | CU        | S      |
| SRGEN     | Simpson Research Center Por-<br>table Generator           | GN   | A           | 34° 37'23" N /<br>82° 43'32" W | >55               | 1                  | N/A        | N/A      | CU        | S      |
| DHBRD107  | Douthit Hills Bradley 107                                 | HT   | U           | 34° 40'57" N /<br>82° 49'48" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHBRD111  | Douthit Hills Bradley 111                                 | HT   | U           | 34° 40'57" N /<br>82° 49'47" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHBRE101  | Douthit Hills Barre 101                                   | HT   | U           | 34° 40'52" N /<br>82° 49'43" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |

| File Name | Description              | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--------------------------|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |                          |      |             |                                |                   |                    |            |          |           |        |
| DHBR201   | Douthit Hills Barre 201  | HT   | U           | 34° 40'52" N /<br>82° 49'41" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHBR207   | Douthit Hills Barre 207  | HT   | U           | 34° 40'52" N /<br>82° 49'40" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHBR211   | Douthit Hills Barre 211  | HT   | U           | 34° 40'52" N /<br>82° 49'38" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL203  | Douthit Hills Daniel 203 | HT   | U           | 34° 40'49" N /<br>82° 49'50" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHDNL301  | Douthit Hills Daniel 301 | HT   | U           | 34° 40'50" N /<br>82° 49'46" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHDNL305  | Douthit Hills Daniel 305 | HT   | U           | 34° 40'51" N /<br>82° 49'45" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL401  | Douthit Hills Daniel 401 | HT   | U           | 34° 40'53" N /<br>82° 49'44" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL500  | Douthit Hills Daniel 500 | HT   | U           | 34° 40'56" N /<br>82° 49'46" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL504  | Douthit Hills Daniel 504 | HT   | U           | 34° 40'56" N /<br>82° 49'44" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL513  | Douthit Hills Daniel 513 | HT   | U           | 34° 40'54" N /<br>82° 49'41" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL517  | Douthit Hills Daniel 517 | HT   | U           | 34° 40'53" N /<br>82° 49'39" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL521  | Douthit Hills Daniel 521 | HT   | U           | 34° 40'53" N /<br>82° 49'37" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL529  | Douthit Hills Daniel 529 | HT   | U           | 34° 40'54" N /<br>82° 49'36" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL535  | Douthit Hills Daniel 535 | HT   | U           | 34° 40'55" N /<br>82° 49'37" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |            |          |           |        |
| DHDNL539  | Douthit Hills Daniel 539                                 | HT   | U           | 34° 40'56" N /<br>82° 49'38" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDNL543  | Douthit Hills Daniel 543                                 | HT   | U           | 34° 40'56" N /<br>82° 49'40" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHDROPOU  | Douthit Hills Drop Out Pre-<br>vention Center Martin 209 | HT   | U           | 34° 40'58" N /<br>82° 49'51" W | 1000              | 1                  | N/A        | SE7A     | CU        | S      |
| DHHUN103  | Douthit Hills Hunter 103                                 | HT   | U           | 34° 40'49" N /<br>82° 49'43" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHHUN104  | Douthit Hills Hunter 104                                 | HT   | U           | 34° 40'49" N /<br>82° 49'40" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHHUN107  | Douthit Hills Hunter 107                                 | HT   | U           | 34° 40'50" N /<br>82° 49'43" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHHUN108  | Douthit Hills Hunter 108                                 | HT   | U           | 34° 40'50" N /<br>82° 49'41" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHMAR217  | Douthit Hills Martin 217                                 | HT   | U           | 34° 40'55" N /<br>82° 49'50" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHMAR221  | Douthit Hills Martin 221                                 | HT   | U           | 34° 40'54" N /<br>82° 49'50" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHMAR225  | Douthit Hills Martin 225                                 | HT   | U           | 34° 40'53" N /<br>82° 49'49" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHMAR229  | Douthit Hills Martin 229                                 | HT   | U           | 34° 40'52" N /<br>82° 49'47" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHNPM100  | Douthit Hills North<br>Palmetto 100                      | HT   | U           | 34° 40'48" N /<br>82° 49'50" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHNPM104  | Douthit Hills North<br>Palmetto 104                      | HT   | U           | 34° 40'49" N /<br>82° 49'51" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |
| DHNPM200  | Douthit Hills North<br>Palmetto 200                      | HT   | U           | 34° 40'49" N /<br>82° 49'54" W | 550               | 1                  | N/A        | SE7A     | CU        | S      |

| File Name | Description   | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |   |      |             |                                |                   |                    |            |          |           |        |
| DHOUGH422 | Douthit Hills Old Greenville Hwy 422                    | HT   | U           | 34° 40'49" N /<br>82° 49'46" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| DHS436    | Douthit Hills Sears House 436                           | HT   | A           | 34° 40'49" N /<br>82° 49'36" W | 550               | 1                  | N/A        | SE8A     | CU        | S      |
| INSFUEL   | Old Insectory Fuel Oil Tank #1                          | HT   | U           | 34° 40'33" N /<br>82° 48'51" W | 280               | 1                  | N/A        | SE12B    | CU        | X      |
| INSFUEL2  | Old Insectory Fuel Oil Tank #2                          | HT   | U           | 34° 40'32" N /<br>82° 48'50" W | 1000              | 1                  | N/A        | SE12B    | CU        | X      |
| RECYUST   | Recycling Center Zoology Station Fuel Oil               | HT   | U           | 34° 40'45" N /<br>82° 49'17" W | 550               | 1                  | N/A        | SE10B    | CU        | S      |
| AGBIOEL1  | Ag Biotech Building Elevator Tank                       | HY   | A           | 34° 40'29" N /<br>82° 49'55" W | 161               | 1                  | 39-0187    | SE7C     | CU        | A      |
| BARNEL1   | Barnett Hall Elevator Tank                              | HY   | A           | 34° 40'38" N /<br>82° 49'55" W | 101               | 1                  | 39-0060    | SE7B     | CU        | A      |
| BRACKEL1  | Brackett Hall Elevator Tank                             | HY   | A           | 34° 40'46" N /<br>82° 50'12" W | 145               | 1                  | 39-0116    | SE5A     | CU        | A      |
| BROOKEL1  | Brooks Center Elevator Tank                             | HY   | A           | 34° 40'26" N /<br>82° 50'10" W | 145               | 1                  | 39-0117    | SE5C     | CU        | A      |
| CALHEL1   | Calhoun Court Apartments Commons Building Elevator Tank | HY   | A           | 34° 40'41" N /<br>82° 49'45" W | 56                | 1                  | 39-0081    | SE7B     | CU        | A      |
| CETLEL1   | CETL Building Elevator Tank                             | HY   | A           | 34° 35'07" N /<br>82° 49'09" W | 106               | 1                  | 04-0147    | N/A      | CU        | A      |
| CPBREL1   | Cooper Library Bridge Elevator Tank                     | HY   | A           | 34° 40'38" N /<br>82° 50'13" W | 155               | 1                  | 39-0041    | SE5B     | CU        | A      |
| FLDNEL1   | Fluor Daniels Building Elevator Tank #1                 | HY   | A           | 34° 40'31" N /<br>82° 50'21" W | 145               | 1                  | 39-0134    | SE5B     | CU        | A      |

| File Name | Description                                 | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
| FLDNEL2   | Fluor Daniels Building<br>Elevator Tank #2  | HY   | A           | 34° 40'31" N /<br>82° 50'21" W | 259               | 1                  | 39-0133    | SE5B     | CU        | A      |
| HENDEL1   | Hendrix Student Center<br>Elevator Tank #1  | HY   | A           | 34° 40'33" N /<br>82° 49'56" W | 134               | 1                  | 39-0171    | SE7B     | CU        | A      |
| HENDEL2   | Hendrix Student Center<br>Elevator Tank #2  | HY   | A           | 34° 40'33" N /<br>82° 49'56" W | 134               | 1                  | 39-0170    | SE7B     | CU        | A      |
| HENDEL3   | Hendrix Student Center<br>Elevator Tank #3  | HY   | A           | 34° 40'33" N /<br>82° 49'56" W | 134               | 1                  | 39-0172    | SE7B     | CU        | A      |
| HOLMSEL1  | Holmes Hall Elevator Tank<br>#1             | HY   | A           | 34° 40'45" N /<br>82° 50'19" W | 215               | 1                  | 39-0126    | SE5B     | CU        | A      |
| HOLMSEL2  | Holmes Hall Elevator Tank<br>#2             | HY   | A           | 34° 40'45" N /<br>82° 50'19" W | 140               | 1                  | 39-0125    | SE5B     | CU        | A      |
| IPTAYEL1  | Iptay / Security Center<br>Elevator Tank #1 | HY   | A           | 34° 40'46" N /<br>82° 50'41" W | 112               | 1                  | 39-0059    | SE3A     | CU        | A      |
| IPTAYEL2  | Iptay / Security Center<br>Elevator Tank #2 | HY   | A           | 34° 40'46" N /<br>82° 50'40" W | 112               | 1                  | 39-0099    | SE3A     | CU        | A      |
| JERVEL1   | Jervey Athletic Center<br>Elevator Tank     | HY   | A           | 34° 40'44" N /<br>82° 50'53" W | 65                | 1                  | 39-0080    | SE2A     | CU        | A      |
| LEEEL1    | Lee Hall Elevator Tank #1                   | HY   | A           | 34° 40'26" N /<br>82° 50'20" W | 120               | 1                  | 39-0047    | SE5C     | CU        | A      |
| LEEEL2    | Lee Hall Elevator Tank #2                   | HY   | A           | 34° 40'29" N /<br>82° 50'18" W | 70                | 1                  | 39-0048    | SE5C     | CU        | A      |
| LEHOTEL1  | Lehotsky Hall Elevator<br>Tank              | HY   | A           | 34° 40'27" N /<br>82° 50'08" W | 112               | 1                  | 39-0109    | SE6C     | CU        | A      |
| LITTEL1   | Littlejohn Coliseum Eleva-<br>tor Tank      | HY   | A           | 34° 40'46" N /<br>82° 50'47" W | 164               | 1                  | 39-193     | SE2A     | CU        | A      |
| LONGEL1   | Long Hall Elevator Tank                     | HY   | A           | 34° 40'40" N /<br>82° 50'06" W | 155               | 1                  | 39-0061    | SE6B     | CU        | A      |

| File Name | Description                                    | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
| LOWRYEL1  | Lowry Hall Elevator Tank                       | HY   | A           | 34° 40'30" N /<br>82° 50'15" W | 65                | 1                  | 39-0049    | SE5B     | CU        | A      |
| MARTEL1   | Martin Hall Elevator Tank                      | HY   | A           | 34° 40'42" N /<br>82° 50'09" W | 123               | 1                  | 39-0065    | SE6B     | CU        | A      |
| MAULEL1   | Mauldin Hall Elevator Tank                     | HY   | A           | 34° 40'40" N /<br>82° 49'58" W | 101               | 1                  | 39-0066    | SE6B     | CU        | A      |
| MCADEL1   | McAdams Hall Elevator<br>Tank                  | HY   | A           | 34° 40'32" N /<br>82° 50'05" W | 83                | 1                  | 39-0046    | SE6B     | CU        | A      |
| MCCABEL1  | McCabe Hall Elevator<br>Tank #1                | HY   | A           | 34° 40'43" N /<br>82° 50'19" W | 103               | 1                  | 39-0123    | SE5B     | CU        | A      |
| MCCABEL2  | McCabe Hall Elevator<br>Tank #2                | HY   | A           | 34° 40'43" N /<br>82° 50'19" W | 103               | 1                  | 39-0124    | SE5B     | CU        | A      |
| OLINEL1   | Olin Hall Elevator Tank                        | HY   | A           | 34° 40'39" N /<br>82° 50'12" W | 135               | 1                  | 39-0040    | SE5B     | CU        | A      |
| RICHEL1   | Rich Laboratory Elevator<br>Tank               | HY   | A           | 34° 35'09" N /<br>82° 49'14" W | 118               | 1                  | 04-0145    | N/A      | CU        | A      |
| RIGGSEL1  | Riggs Hall Elevator Tank                       | HY   | A           | 34° 40'36" N /<br>82° 50'15" W | 155               | 1                  | 39-0052    | SE5B     | CU        | A      |
| SCHILEL1  | Schilleter Dining Hall<br>Elevator Tank        | HY   | A           | 34° 40'37" N /<br>82° 50'00" W | 121               | 1                  | 39-0064    | SE6B     | CU        | A      |
| SMITHEL1  | Smith Hall Elevator Tank                       | HY   | A           | 34° 40'41" N /<br>82° 49'54" W | 90                | 1                  | 39-0062    | SE7B     | CU        | A      |
| STADNEL1  | Memorial Stadium North<br>Elevator Tank #1 (A) | HY   | A           | 34° 40'37" N /<br>82° 50'28" W | 177               | 1                  | 39-0067    | SE3A     | CU        | A      |
| STADNEL2  | Memorial Stadium North<br>Elevator Tank #2 (B) | HY   | A           | 34° 40'37" N /<br>82° 50'28" W | 177               | 1                  | 39-0029    | SE3A     | CU        | A      |
| STADNEL3  | Memorial Stadium North<br>Elevator Tank #3 (C) | HY   | A           | 34° 40'37" N /<br>82° 50'28" W | 177               | 1                  | 39-0094    | SE3A     | CU        | A      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
| STADNEL4  | Memorial Stadium North Elevator Tank #4 (D)                | HY   | A           | 34° 40'37" N /<br>82° 50'28" W | 177               | 1                  | 39-0095    | SE3A     | CU        | A      |
| STADSEL1  | Memorial Stadium South Elevator Tank #1                    | HY   | A           | 34° 40'44" N /<br>82° 50'36" W | 110               | 1                  | 39-0028    | SE3B     | CU        | A      |
| STADSEL2  | Memorial Stadium South Elevator Tank #2                    | HY   | A           | 34° 40'44" N /<br>82° 50'36" W | 110               | 1                  | 39-0090    | SE3B     | CU        | A      |
| STROMEL1  | Strom Thurmond Center Elevator Tank                        | HY   | A           | 34° 40'31" N /<br>82° 50'13" W | 118               | 1                  | 39-0023    | SE5B     | CU        | A      |
| UNIONEL1  | University Union Elevator Tank                             | HY   | A           | 34° 40'45" N /<br>82° 50'20" W | 65                | 1                  | 39-0038    | SE5A     | CU        | A      |
| VICKEL1   | Vickery Hall Elevator Tank                                 | HY   | A           | 34° 40'39" N /<br>82° 50'01" W | 101               | 1                  | 39-0026    | SE6B     | CU        | A      |
| WCAMPEL1  | West Campus Housing Elevator Tank #1                       | HY   | A           | 34° 40'42" N /<br>82° 50'27" W | 137               | 1                  | 39-0185    | SE4B     | CU        | A      |
| WCAMPEL2  | West Campus Housing Elevator Tank #2                       | HY   | A           | 34° 40'42" N /<br>82° 50'27" W | 137               | 1                  | 39-0186    | SE4B     | CU        | A      |
| ABEARLE   | Earle Hall Propane Tank                                    | PR   | U           | 34° 40'32" N /<br>82° 50'23" W | 250               | 1                  | N/A        | SE4B     | CU        | X      |
| GNCOMCTR  | Computer Center Generator Propane Storage Tank (Route 187) | PR   | U           | 34° 35'10" N /<br>82° 49'16" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| HYDPROP   | Hydraulics Lab Propane Tank                                | PR   | A           | 34° 40'03" N /<br>82° 50'48" W | 500               | 1                  | N/A        | SE2D     | CU        | X      |
| PRAGSRV   | Agricultural Services Building Propane Tank                | PR   | A           | 34° 39'29" N /<br>82° 49'55" W | 100               | 1                  | N/A        | N/A      | CU        | S      |
| PRATHLET  | Athletic Department Propane Tank                           | PR   | A           | 34° 40'18" N /<br>82° 51'07" W | 1000              | 1                  | N/A        | SE1C     | CU        | S      |

| File Name | Description   | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |   |      |             |                                |                   |                    |            |          |           |        |
| PRBRACK   | Brackett Hall Propane Tank                              | PR   | U           | 34° 40'43" N /<br>82° 50'12" W | 412               | 1                  | N/A        | SE5B     | CU        | S      |
| PRBRK2    | Brackett Hall Propane Tank<br>(Storage #1)              | PR   | A           | 34° 40'43" N /<br>82° 50'11" W | 100               | 1                  | N/A        | SE5B     | CU        | S      |
| PRBRK3    | Brackett Hall Propane Tank<br>(Storage #2)              | PR   | A           | 34° 40'43" N /<br>82° 50'11" W | 100               | 1                  | N/A        | SE5B     | CU        | S      |
| PRCLMHSE  | Clemson House Propane<br>Tank (Water Tank Area)         | PR   | A           | 34° 40'50" N /<br>82° 49'59" W | 100               | 1                  | N/A        | SE6A     | CU        | S      |
| PRCOOKLB  | Cook Engineering Laboratory<br>Propane Tank             | PR   | A           | 34° 40'35" N /<br>82° 50'16" W | 100               | 1                  | N/A        | SE5B     | CU        | S      |
| PRDNR     | Department of Natural Re-<br>sources (DNR) Propane Tank | PR   | A           | 34° 41'22" N /<br>82° 52'16" W | 320               | 1                  | N/A        | NW6B     | CU        | S      |
| PREQUINE  | Equine Center Propane Tank                              | PR   | A           | 34° 38'38" N /<br>82° 48'58" W | 320               | 1                  | N/A        | N/A      | CU        | S      |
| PRESE     | ESE Building Propane Tank<br>(Route 187)                | PR   | A           | 34° 35'08" N /<br>82° 49'15" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| PRFEEDPR  | Feed Processing Plant<br>Propane Tank                   | PR   | A           | 34° 39'17" N /<br>82° 50'11" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| PRFISHRY  | Fisheries Propane Tank                                  | PR   | A           | 34° 40'11" N /<br>82° 50'44" W | 250               | 1                  | N/A        | SE3D     | CU        | S      |
| PRFLDAN   | Fluor Daniels Propane Tank                              | PR   | A           | 34° 40'31" N /<br>82° 50'23" W | 320               | 1                  | N/A        | SE4B     | CU        | S      |
| PRFORBT   | Forestry Botanical Gardens<br>Propane Tank              | PR   | A           | 34° 40'23" N /<br>82° 49'13" W | 500               | 1                  | N/A        | SE10C    | CU        | S      |
| PRFORBT2  | Forestry Botanical Gardens<br>Propane Tank #2           | PR   | A           | 34° 40'29" N /<br>82° 49'11" W | 500               | 1                  | N/A        | SE10C    | CU        | S      |
| PRFORBT3  | Forestry Botanical Gardens<br>Propane Tank #3           | PR   | A           | 34° 40'29" N /<br>82° 49'11" W | 320               | 1                  | N/A        | SE10C    | CU        | S      |

| File Name | Description                          | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--------------------------------------|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
| PRFRMNTK  | Freeman Hall Propane Tank (E)        | PR   | A           | 34° 40'34" N /<br>82° 50'15" W | 100               | 1                  | N/A        | SE5B     | CU        | S      |
| PRGARR1   | Garrison Arena Propane Tank          | PR   | A           | 34° 38'18" N /<br>82° 48'44" W | 100               | 1                  | N/A        | N/A      | CU        | S      |
| PRGODLY1  | Godley Snell Propane Tank #1         | PR   | A           | 34° 40'19" N /<br>82° 49'55" W | 1000              | 1                  | N/A        | SE7C     | CU        | S      |
| PRGODLY2  | Godley Snell Propane Tank #2         | PR   | A           | 34° 40'19" N /<br>82° 49'55" W | 250               | 1                  | N/A        | SE7C     | CU        | S      |
| PRHUNTER  | Hunter Hall Propane Tank             | PR   | A           | 34° 40'36" N /<br>82° 50'23" W | 500               | 1                  | N/A        | SE4B     | CU        | S      |
| PRIPTAY   | Iptay / Security Center Propane Tank | PR   | A           | 34° 40'45" N /<br>82° 50'40" W | 100               | 1                  | N/A        | SE3A     | CU        | S      |
| PRJORD    | Jordan Hall Propane Tank             | PR   | A           | 34° 40'40" N /<br>82° 50'04" W | 500               | 1                  | N/A        | SE6B     | CU        | S      |
| PRKINARD  | Kinard Laboratory Propane Tank       | PR   | A           | 34° 40'38" N /<br>82° 50'06" W | 100               | 1                  | N/A        | SE6B     | CU        | S      |
| PRKINUST  | Kinard South / Central Propane Tank  | PR   | U           | 34° 40'38" N /<br>82° 50'06" W | 317               | 1                  | N/A        | SE6B     | CU        | S      |
| PRLAMDRY  | Lamaster Dairy Propane Tank          | PR   | A           | 34° 39'34" N /<br>82° 49'24" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| PRLEEUST  | Lee Hall Propane Tank                | PR   | U           | 34° 40'27" N /<br>82° 50'17" W | 1000              | 1                  | N/A        | SE5C     | CU        | S      |
| PRLEHUST  | Lehotsky Hall Propane Tank           | PR   | U           | 34° 40'25" N /<br>82° 50'07" W | 500               | 1                  | N/A        | SE6C     | CU        | S      |
| PRLHTK    | Long Hall Propane Tank (SW)          | PR   | A           | 34° 40'40" N /<br>82° 50'05" W | 100               | 1                  | N/A        | SE6B     | CU        | S      |
| PRLMD100  | Lamaster Dairy Propane A/B           | PR   | A           | 34° 39'34" N /<br>82° 49'24" W | 100               | 2                  | N/A        | N/A      | CU        | S      |

| File Name | Description                               | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
| PRMAINT1  | Landscaping / Maintenance Propane Tank #1 | PR   | A           | 34° 40'16" N /<br>82° 50'27" W | 500               | 1                  | N/A        | SE4C     | CU        | S      |
| PRMAINT2  | Landscaping / Maintenance Propane Tank #2 | PR   | A           | 34° 40'15" N /<br>82° 50'25" W | 1000              | 1                  | N/A        | SE4C     | CU        | S      |
| PRMAINT3  | Landscaping / Maintenance Propane Tank #3 | PR   | A           | 34° 40'18" N /<br>82° 50'24" W | 1000              | 1                  | N/A        | SE4C     | CU        | S      |
| PRMUSSER  | Musser Fruit Farm Propane Tank            | PR   | A           | 34° 36'01" N /<br>82° 52'47" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| PRNEUTK   | Newman Hall Propane Tank (SE)             | PR   | A           | 34° 40'27" N /<br>82° 49'59" W | 100               | 1                  | N/A        | SE6C     | CU        | S      |
| PRNEWNW   | Newman Hall Propane Tank (NW) #1          | PR   | A           | 34° 40'30" N /<br>82° 50'02" W | 100               | 1                  | N/A        | SE6C     | CU        | S      |
| PRNEWNW2  | Newman Hall Propane Tank (NW) #2          | PR   | A           | 34° 40'30" N /<br>82° 50'02" W | 100               | 1                  | N/A        | SE6C     | CU        | S      |
| PRNEWWW   | Newman Hall Propane Tank (W)              | PR   | A           | 34° 40'29" N /<br>82° 50'00" W | 100               | 1                  | N/A        | SE6C     | CU        | S      |
| PRPNAUST  | Poole Agricultural Propane Tank #2        | PR   | U           | 34° 40'26" N /<br>82° 50'01" W | 955               | 1                  | N/A        | SE6C     | CU        | S      |
| PRPOOLE   | Poole Agricultural Building Propane Tank  | PR   | A           | 34° 40'24" N /<br>82° 50'03" W | 100               | 1                  | N/A        | SE6C     | CU        | S      |
| PRRHOD    | Rhodes Research Propane Tank              | PR   | A           | 34° 40'36" N /<br>82° 50'15" W | 100               | 1                  | N/A        | SE5B     | CU        | S      |
| PRSECUR   | Security Center Propane Tank              | PR   | A           | 34° 40'45" N /<br>82° 50'40" W | 100               | 1                  | N/A        | SE3A     | CU        | S      |
| PRSN      | Simpson Research Propane Tank             | PR   | A           | 34° 37'21" N /<br>82° 43'31" W | 320               | 1                  | N/A        | N/A      | CU        | S      |
| PRSRTK    | Sirrine Tank Propane Tank (SW)            | PR   | A           | 34° 40'36" N /<br>82° 50'23" W | 100               | 1                  | N/A        | SE4B     | CU        | S      |

| File Name | Description                                | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |            |          |           |        |
| PRTIWET1  | TIWET Building Propane Tank #1 (Pendleton) | PR   | A           | 34° 38'23" N /<br>82° 46'23" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| PRTIWET2  | TIWET Building Propane Tank #2 (Pendleton) | PR   | A           | 34° 38'23" N /<br>82° 46'23" W | 500               | 1                  | N/A        | N/A      | CU        | S      |
| PRTOOL    | Tool Room Propane Tank (Facilities)        | PR   | A           | 34° 40'48" N /<br>82° 50'26" W | 500               | 1                  | N/A        | SE4A     | CU        | S      |
| PRUSTWTR  | Waste Treatment Propane Tank               | PR   | U           | 34° 40'06" N /<br>82° 51'09" W | 1000              | 1                  | N/A        | SW1D     | CU        | S      |
| SHLPROP1  | Shoreline Restoration Propane Tank (S)     | PR   | A           | 34° 40'09" N /<br>82° 50'39" W | 320               | 1                  | N/A        | SE3D     | CU        | S      |
| SHLPROP2  | Shoreline Restoration Propane Tank (C)     | PR   | A           | 34° 40'09" N /<br>82° 50'40" W | 320               | 1                  | N/A        | SE3D     | CU        | S      |
| SHLPROP3  | Shoreline Restoration Propane Tank (N)     | PR   | A           | 34° 40'09" N /<br>82° 50'41" W | 320               | 1                  | N/A        | SE3D     | CU        | S      |
| SW402     | #402 Switch                                | SW   | A           | 34° 40'36" N /<br>82° 50'06" W | 285               | 1                  | N/A        | SE6B     | CU        | A      |
| SW403     | #403 Switch                                | SW   | A           | 34° 40'36" N /<br>82° 50'07" W | 76                | 1                  | N/A        | SE6B     | CU        | A      |
| SW417     | #417 Switch                                | SW   | A           | 34° 40'32" N /<br>82° 50'19" W | 252               | 1                  | N/A        | SE5B     | CU        | A      |
| SW451A    | Brooks Center #451A Switch                 | SW   | A           | 34° 40'18" N /<br>82° 50'06" W | 82                | 1                  | N/A        | SE6C     | CU        | A      |
| SW460     | Memorial Stadium #460 Switch (N)           | SW   | A           | 34° 40'48" N /<br>82° 50'35" W | 109               | 1                  | N/A        | SE3A     | CU        | A      |
| SWBANDFD  | Band Field Switch                          | SW   | A           | 34° 40'22" N /<br>82° 50'18" W | 139               | 1                  | N/A        | SE5C     | CU        | A      |
| SWBRKS2   | Brooks Center Switch #2                    | SW   | A           | 34° 40'24" N /<br>82° 50'09" W | 130               | 1                  | N/A        | SE5C     | CU        | A      |

| File Name | Description                                    | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s  | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|-------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |             |          |           |        |
| SWBROOKS  | Brooks Center Switch #1                        | SW   | A           | 34° 40'24" N /<br>82° 50'08" W | 115               | 1                  | N/A         | SE6C     | CU        | A      |
| SWBYRNS   | Byrnes Hall Switch                             | SW   | A           | 34° 40'40" N /<br>82° 49'52" W | 62                | 1                  | N/A         | SE7B     | CU        | A      |
| SWCENRCV  | Central Receiving Switch                       | SW   | A           | 34° 40'21" N /<br>82° 50'27" W | 140               | 1                  | N/A         | SE4C     | CU        | A      |
| SWCIR5    | Memorial Stadium Circuit<br>#5 Switch (N)      | SW   | A           | 34° 40'49" N /<br>82° 50'35" W | 125               | 1                  | N/A         | SE3A     | CU        | A      |
| SWECAMP   | East Campus Switch                             | SW   | A           | 34° 40'31" N /<br>82° 49'53" W | 173               | 1                  | N/A         | SE7B     | CU        | A      |
| SWFLUORD  | Fluor Daniels Building<br>Switch               | SW   | A           | 34° 40'23" N /<br>82° 50'31" W | 72                | 1                  | N/A         | SE4C     | CU        | A      |
| SWHEACR   | Health Center Switch                           | SW   | A           | 34° 40'35" N /<br>82° 50'00" W | 62                | 1                  | N/A         | SE6B     | CU        | A      |
| SWHUNTER  | Hunter Hall Switch                             | SW   | A           | 34° 40'35" N /<br>82° 50'25" W | 131               | 1                  | N/A         | SE4B     | CU        | A      |
| SWINTHS   | Hunter / Surrine Hall Inter-<br>section Switch | SW   | A           | 34° 40'35" N /<br>82° 50'25" W | 79                | 1                  | 609-85-0056 | SE4B     | CU        | A      |
| SWJERVEY  | Jervey Athletic Center<br>Switch               | SW   | A           | 34° 40'45" N /<br>82° 50'51" W | 163               | 1                  | N/A         | SE2A     | CU        | A      |
| SWJORD    | Jordan Hall Switch                             | SW   | A           | 34° 40'39" N /<br>82° 50'00" W | 93                | 1                  | N/A         | SE6B     | CU        | A      |
| SWLEVER   | Lever Hall Switch                              | SW   | A           | 34° 40'39" N /<br>82° 49'55" W | 65                | 1                  | N/A         | SE7B     | CU        | A      |
| SWLONG    | Long Hall Switch                               | SW   | A           | 34° 40'41" N /<br>82° 50'03" W | 65                | 1                  | N/A         | SE6B     | CU        | A      |
| SWMANB    | Manhole B Switch                               | SW   | A           | 34° 40'43" N /<br>82° 50'24" W | 124               | 1                  | N/A         | SE4B     | CU        | A      |

| File Name | Description                        | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s  | Quadrant | Ownership | Status |
|-----------|------------------------------------|------|-------------|--------------------------------|-------------------|--------------------|-------------|----------|-----------|--------|
|           |                                    |      |             |                                |                   |                    |             |          |           |        |
| SWMANC    | Manhole C Switch                   | SW   | A           | 34° 40'43" N /<br>82° 50'21" W | 195               | 1                  | N/A         | SE5B     | CU        | A      |
| SWMANN    | Manning Hall Switch                | SW   | A           | 34° 40'39" N /<br>82° 49'55" W | 60                | 1                  | N/A         | SE7B     | CU        | A      |
| SWMH4A    | MH4A Switch                        | SW   | A           | 34° 40'33" N /<br>82° 50'19" W | 62                | 1                  | N/A         | SE5B     | CU        | A      |
| SWMRTKIN  | Martin / Kinard Laboratory Switch  | SW   | A           | 34° 40'39" N /<br>82° 50'07" W | 80                | 1                  | N/A         | SE6B     | CU        | A      |
| SWNURS    | Nursing Center Switch              | SW   | A           | 34° 40'35" N /<br>82° 49'59" W | 93                | 1                  | N/A         | SE6B     | CU        | A      |
| SWPRESH   | President's House Switch           | SW   | A           | 34° 40'40" N /<br>82° 49'52" W | 119               | 1                  | N/A         | SE7B     | CU        | A      |
| SWSCHL    | Schilleter Dining Hall Switch      | SW   | A           | 34° 40'37" N /<br>82° 49'59" W | 62                | 1                  | N/A         | SE6B     | CU        | A      |
| SWSIKES   | Sikes Hall Switch                  | SW   | A           | 34° 40'45" N /<br>82° 50'07" W | 65                | 1                  | N/A         | SE6A     | CU        | A      |
| SWSMITH   | Smith Hall Switch                  | SW   | A           | 34° 40'40" N /<br>82° 49'55" W | 60                | 1                  | N/A         | SE7B     | CU        | A      |
| SWSTINST  | Strom Thurmond Center Switch       | SW   | A           | 34° 40'25" N /<br>82° 50'12" W | 165               | 1                  | N/A         | SE5C     | CU        | A      |
| SWWCAMP   | West Campus Substation Switch      | SW   | A           | 34° 40'46" N /<br>82° 50'27" W | 120               | 1                  | 611-72-0115 | SE4A     | CU        | A      |
| CEFTURB1  | Central Energy Facility Turbine #1 | TB   | A           | 34° 40'46" N /<br>82° 50'28" W | 400               | 1                  | N/A         | SE4A     | CU        | A      |
| CEFTURB2  | Central Energy Facility Turbine #2 | TB   | A           | 34° 40'46" N /<br>82° 50'26" W | 160               | 1                  | N/A         | SE4A     | CU        | A      |
| AGBIOTR1  | Ag Biotech Building Transformer    | TS   | A           | 34° 40'27" N /<br>82° 49'55" W | 560               | 1                  | 000299-A1   | SE7C     | CU        | A      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s  | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|-------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |             |          |           |        |
| AGSRV1DK  | Agricultural Services Building Transformer (Duke)  | TS   | A           | 34° 39'29" N /<br>82° 49'55" W | >55               | 1                  | 79D943204   | N/A      | DK        | A      |
| ALUMCR1   | Alumni Center Transformer                          | TS   | A           | 34° 40'53" N /<br>82° 50'08" W | 140               | 1                  | 42236       | SE6A     | CU        | A      |
| APRCH1DK  | Apparel Research Transformer #1 (Duke)             | TS   | A           | 34° 38'24" N /<br>82° 46'16" W | >55               | 1                  | UNAV        | N/A      | DK        | A      |
| APRCH2DK  | Apparel Research Transformer #2 (Duke)             | TS   | A           | 34° 38'24" N /<br>82° 46'16" W | >55               | 1                  | 6-29123-1-I | N/A      | DK        | A      |
| ASPH1BR   | Asphalt Laboratory Transformer (Blue Ridge)        | TS   | A           | 34° 41'25" N /<br>82° 52'06" W | 146               | 1                  | 1108560202  | NW5B     | BR        | A      |
| BARRE1    | Barre Hall Transformer                             | TS   | A           | 34° 40'29" N /<br>82° 50'08" W | 119               | 1                  | H-887890    | SE6C     | CU        | A      |
| BASEBAL1  | Baseball Stadium Transformer #1                    | TS   | A           | 34° 40'47" N /<br>82° 50'56" W | 275               | 1                  | P494458TZC  | SE2A     | CU        | A      |
| BASEBAL2  | Baseball Stadium Transformer #2                    | TS   | A           | 34° 40'47" N /<br>82° 50'56" W | 219               | 1                  | 856003640   | SE2A     | CU        | A      |
| BLOWR1DK  | Waste Treatment Blower House Transformer (Duke)    | TS   | A           | 34° 40'05" N /<br>82° 51'04" W | 211               | 1                  | 959000314   | SE1D     | DK        | A      |
| BRICK1DK  | Brick Research Transformer (Duke)                  | TS   | A           | 34° 35'13" N /<br>82° 48'25" W | >55               | 1                  | 1241870891  | N/A      | DK        | A      |
| BYRNES1   | Byrnes Hall Transformer                            | TS   | A           | 34° 40'39" N /<br>82° 49'52" W | 205               | 1                  | PCV-1457-01 | SE7B     | CU        | A      |
| CAT1DK    | CAT Building Transformer (Duke)                    | TS   | A           | 34° 38'23" N /<br>82° 46'15" W | >55               | 1                  | P809537-TRF | N/A      | DK        | A      |
| CCRTCOM   | Calhoun Court Apts. Commons Building Transformer   | TS   | A           | 34° 40'40" N /<br>82° 49'45" W | 163               | 1                  | 806006515   | SE8B     | CU        | A      |
| CCR TN13  | Calhoun Court Apartments Building N-13 Transformer | TS   | A           | 34° 40'44" N /<br>82° 49'44" W | 250               | 1                  | 84JJ273055  | SE8B     | CU        | A      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s  | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|-------------|----------|-----------|--------|
| CCRTN2    | Calhoun Court Apartments<br>Building N-2 Transformer               | TS   | A           | 34° 40'41" N /<br>82° 49'45" W | 189               | 1                  | 806006443   | SE8B     | CU        | A      |
| CCRTN3    | Calhoun Court Apartments<br>Building N-3 Transformer               | TS   | A           | 34° 40'42" N /<br>82° 49'47" W | 159               | 1                  | 806006441   | SE7B     | CU        | A      |
| CCRTN6    | Calhoun Court Apartments<br>Building N-6 Transformer               | TS   | A           | 34° 40'42" N /<br>82° 49'43" W | 250               | 1                  | 84JJ267140  | SE8B     | CU        | A      |
| CCRTN9    | Calhoun Court Apartments<br>Building N-9 Transformer               | TS   | A           | 34° 40'44" N /<br>82° 49'46" W | 250               | 1                  | 84JJ274047  | SE7B     | CU        | A      |
| CCRTS10   | Calhoun Court Apartments<br>Building S-10 Transformer              | TS   | A           | 34° 40'36" N /<br>82° 49'45" W | 189               | 1                  | 806006446   | SE8B     | CU        | A      |
| CCRTS3    | Calhoun Court Apartments<br>Building S-3 Transformer               | TS   | A           | 34° 40'39" N /<br>82° 49'47" W | 189               | 1                  | 806006445   | SE7B     | CU        | A      |
| CCRTS6    | Calhoun Court Apartments<br>Building S-6 Transformer               | TS   | A           | 34° 40'37" N /<br>82° 49'44" W | 189               | 1                  | 806006444   | SE8B     | CU        | A      |
| CCRTS9    | Calhoun Court Apartments<br>Building S-9 Transformer               | TS   | A           | 34° 40'37" N /<br>82° 49'47" W | 189               | 1                  | 806006442   | SE7B     | CU        | A      |
| CEF1      | Central Energy Facility<br>Transformer                             | TS   | A           | 34° 40'46" N /<br>82° 50'27" W | 335               | 1                  | 0255441-TPK | SE4A     | CU        | A      |
| CLM2ADK   | East Campus / Clemson<br>Station #2 Bank #1A<br>Transformer (Duke) | TS   | A           | 34° 40'29" N /<br>82° 49'50" W | 5118              | 1                  | C-C4947-5-8 | SE7C     | DK        | A      |
| CLM2BDK   | East Campus / Clemson<br>Station #2 Bank #2B<br>Transformer (Duke) | TS   | A           | 34° 40'29" N /<br>82° 49'50" W | 5118              | 1                  | C-C4947-5-9 | SE7C     | DK        | A      |
| CLMHSDW1  | Clemson House Trans-<br>former (Dishwasher)                        | TS   | A           | 34° 40'54" N /<br>82° 50'02" W | 125               | 1                  | 18886       | SE6A     | CU        | A      |
| CLMHSE1   | Clemson House Trans-<br>former                                     | TS   | A           | 34° 40'50" N /<br>82° 50'02" W | 305               | 1                  | 940319-A1   | SE6A     | CU        | A      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s          | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|---------------------|----------|-----------|--------|
| COMP1DK   | Computer Center Transformer<br>(Duke)                      | TS   | A           | 34° 35'10" N /<br>82° 49'16" W | 345               | 1                  | Q104629-TVG         | N/A      | DK        | A      |
| COOPER1   | Cooper Library Transformer                                 | TS   | A           | 34° 40'35" N /<br>82° 50'11" W | 157               | 1                  | E694404             | SE5B     | CU        | A      |
| DANIEL1   | Daniel Hall Transformer                                    | TS   | A           | 34° 40'38" N /<br>82° 50'07" W | 204               | 1                  | 5762-01             | SE6B     | CU        | A      |
| DILLARD1  | Dillard Building Transformer                               | TS   | A           | 34° 40'44" N /<br>82° 50'26" W | 359               | 1                  | 980579-VA           | SE4B     | CU        | A      |
| EARLE1    | Earle Hall Transformer                                     | TS   | A           | 34° 40'34" N /<br>82° 50'25" W | 240               | 1                  | C862455             | SE4B     | CU        | A      |
| ECAMPCE1  | East Campus Central Energy<br>Facility Transformer (SW)    | TS   | A           | 34° 40'34" N /<br>82° 49'48" W | 247               | 1                  | 806004785           | SE7B     | CU        | A      |
| ECMPSUB1  | East Campus Substation<br>Transformer #1                   | TS   | A           | 34° 40'30" N /<br>82° 49'51" W | 570               | 1                  | 5748379             | SE7C     | CU        | A      |
| ECMPSUB2  | East Campus Substation<br>Transformer #2                   | TS   | A           | 34° 40'30" N /<br>82° 49'51" W | 570               | 1                  | 5748382             | SE7C     | CU        | A      |
| ECMPSUB3  | East Campus Substation<br>Transformer #3                   | TS   | A           | 34° 40'30" N /<br>82° 49'51" W | 570               | 1                  | 5748381             | SE7C     | CU        | A      |
| ECMPSUB4  | East Campus Substation<br>Transformer #4                   | TS   | A           | 34° 40'30" N /<br>82° 49'51" W | 570               | 1                  | 5748380             | SE7C     | CU        | A      |
| EDWARDS1  | Edwards Hall Transformer                                   | TS   | A           | 34° 40'36" N /<br>82° 50'04" W | 174               | 1                  | H-884441A           | SE6B     | CU        | A      |
| FEED1DK   | Feed Processing Plant Trans-<br>former / Pole Mount (Duke) | TS   | A           | 34° 39'17" N /<br>82° 50'09" W | >55               | 1                  | UNAV                | N/A      | DK        | A      |
| FIKETMP1  | Fike Recreational Center<br>Temporary Transformer          | TS   | A           | 34° 40'47" N /<br>82° 50'30" W | 168               | 1                  | 746000407           | SE4A     | CU        | A      |
| FIKPERM1  | Fike Recreation Center<br>Transformer (Permanent)          | TS   | A           | 34° 40'49" N /<br>82° 50'29" W | 455               | 1                  | 15988977-<br>003-01 | SE4A     | CU        | A      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s  | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|-------------|----------|-----------|--------|
| FOR1BR    | Forestry Field Transformer<br>(Blue Ridge)             | TS   | A           | 34° 41'21" N /<br>82° 52'10" W | 97                | 1                  | 2065633591  | NW6B     | BR        | A      |
| FRATQD1   | Fraternity Quad Trans-<br>former                       | TS   | A           | 34° 40'50" N /<br>82° 50'19" W | 450               | 1                  | Q569178-TTS | SE5A     | CU        | A      |
| FTPRAC1   | Football Practice Field<br>Transformer #1              | TS   | A           | 34° 40'33" N /<br>82° 50'48" W | 150               | 1                  | 01625-6     | SE2B     | CU        | A      |
| FTPRAC2   | Football Practice Field<br>Transformer #2              | TS   | A           | 34° 40'33" N /<br>82° 50'48" W | 75                | 1                  | 010628-24   | SE2B     | CU        | A      |
| GARR1DK   | Garrison Arena Transformer<br>#1 (Duke)                | TS   | A           | 34° 38'13" N /<br>82° 48'41" W | 190               | 1                  | 0037005370  | N/A      | DK        | A      |
| GARR2DK   | Garrison Arena Transformer<br>#2 / Cattle Barn (Duke)  | TS   | A           | 34° 38'18" N /<br>82° 48'47" W | >55               | 1                  | 906007997   | N/A      | DK        | A      |
| GARR3DK   | Garrison Arena Transformer<br>#3 / Arena Area (Duke)   | TS   | A           | 34° 38'18" N /<br>82° 48'43" W | >55               | 1                  | UNAV        | N/A      | DK        | A      |
| GF18DK    | Walker Golf Course 18th<br>Tee Transformer (Duke)      | TS   | A           | 34° 39'50" N /<br>82° 50'44" W | 272               | 1                  | 2508682894  | SE3E     | DK        | A      |
| GFPRODK   | Walker Golf Course Pro<br>Shop Transformer (Duke)      | TS   | A           | 34° 40'00" N /<br>82° 50'34" W | 187               | 1                  | 3692005094  | SE3E     | DK        | A      |
| GLASS1DK  | Glass Vitrification Labora-<br>tory Transformer (Duke) | TS   | A           | 34° 35'08" N /<br>82° 49'14" W | 278               | 1                  | 1837852592  | N/A      | DK        | A      |
| GOLFPR1   | Golf Practice Facility Trans-<br>former                | TS   | A           | 34° 40'22" N /<br>82° 51'07" W | 177               | 1                  | 3670154695  | SE1C     | CU        | A      |
| GSNELL1   | Godley Snell Transformer                               | TS   | A           | 34° 40'20" N /<br>82° 49'56" W | 310               | 1                  | Q245612-TTS | SE7C     | CU        | A      |
| HARDIN1   | Hardin Hall Transformer                                | TS   | A           | 34° 40'41" N /<br>82° 50'13" W | 161               | 1                  | PGL-1320    | SE5B     | CU        | A      |
| HENDRIX1  | Hendrix Student Center<br>Transformer                  | TS   | A           | 34° 40'34" N /<br>82° 49'58" W | 495               | 1                  | 989009960   | SE6B     | CU        | A      |

| File Name | Description  | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s          | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|---------------------|----------|-----------|--------|
| HOLZEN1   | Holzendorff Hall Transformer                           | TS   | A           | 34° 40'53" N /<br>82° 50'17" W | 150               | 1                  | 18136               | SE5A     | CU        | A      |
| HOPE1     | Camp Hope Transformer #1<br>(Kresge Hall)              | TS   | A           | 34° 37'15" N /<br>82° 50'49" W | 120               | 1                  | 79V2494             | N/A      | CU        | A      |
| HOPE2     | Camp Hope Transformer #2<br>(Bowfin Lodge)             | TS   | A           | 34° 37'19" N /<br>82° 50'43" W | 164               | 1                  | 81V2723             | N/A      | CU        | A      |
| HYDLAB1   | Hydraulics Lab Transformer                             | TS   | A           | 34° 40'03" N /<br>82° 50'46" W | 400               | 1                  | 8144668             | SE2D     | CU        | A      |
| INTRK1    | Indoor Track Transformer                               | TS   | A           | 34° 40'29" N /<br>82° 51'00" W | 308               | 1                  | 16159929-011-<br>01 | SE1C     | CU        | A      |
| IPTAY1    | Iptay / Security Center<br>Transformer                 | TS   | A           | 34° 40'45" N /<br>82° 50'41" W | 210               | 1                  | 846005676           | SE3A     | CU        | A      |
| JERVEY1   | Jervey Athletic Center<br>Transformer                  | TS   | A           | 34° 40'46" N /<br>82° 50'53" W | 140               | 1                  | 21435-A01           | SE2A     | CU        | A      |
| JORDAN1   | Jordan Hall Transformer                                | TS   | A           | 34° 40'38" N /<br>82° 50'05" W | 314               | 1                  | PCV2582-01          | SE6B     | CU        | A      |
| KLUGHJS1  | Klugh Avenue / Johnstone<br>Transformer                | TS   | A           | 34° 40'45" N /<br>82° 50'23" W | 55                | 1                  | REI3451             | SE4A     | CU        | A      |
| LBBLD1    | Lightsey Bridge Apartments<br>Building #1 Transformer  | TS   | A           | 34° 40'27" N /<br>82° 49'41" W | 280               | 1                  | 906010965           | SE8C     | CU        | A      |
| LBBLD10   | Lightsey Bridge Apartments<br>Building #10 Transformer | TS   | A           | 34° 40'24" N /<br>82° 49'42" W | 230               | 1                  | 906011003           | SE8C     | CU        | A      |
| LBBLD12   | Lightsey Bridge Apartments<br>Building #12 Transformer | TS   | A           | 34° 40'31" N /<br>82° 49'40" W | 225               | 1                  | Q560519-TVR         | SE8B     | CU        | A      |
| LBBLD17   | Lightsey Bridge Apartments<br>Building #17 Transformer | TS   | A           | 34° 40'30" N /<br>82° 49'36" W | 225               | 1                  | Q560518-TVR         | SE8C     | CU        | A      |
| LBBLD18   | Lightsey Bridge Apartments<br>Building #18 Transformer | TS   | A           | 34° 40'30" N /<br>82° 49'36" W | 235               | 1                  | Q560516-TVR         | SE8B     | CU        | A      |

| File Name | Description   | Type | UST/<br>AST | LAT/LONG                    | Size<br>(Gallons) | # of<br>Containers | Serial #'s                                  | Quadrant | Ownership | Status |
|-----------|---|------|-------------|-----------------------------|-------------------|--------------------|---|----------|-----------|--------|
|           |   |      |             |                             |                   |                    |   |          |           |        |
| LBBLD20   | Lightsey Bridge Apartments Building #20 Transformer         | TS   | A           | 34° 40'32" N / 82° 49'39" W | 235               | 1                  | Q560515-TVR                                 | SE8B     | CU        | A      |
| LBBLD3    | Lightsey Bridge Apartments Building #3 Transformer          | TS   | A           | 34° 40'27" N / 82° 49'41" W | 429               | 1                  | 906011061                                   | SE8C     | CU        | A      |
| LBBLD6    | Lightsey Bridge Apartments Building #6 Transformer          | TS   | A           | 34° 40'29" N / 82° 49'44" W | 280               | 1                  | 906010967                                   | SE8C     | CU        | A      |
| LBBLD7    | Lightsey Bridge Apartments Building #7 Transformer          | TS   | A           | 34° 40'26" N / 82° 49'47" W | 280               | 1                  | 906010966                                   | SE7C     | CU        | A      |
| LBBLD9    | Lightsey Bridge Apartments Building #9 Transformer          | TS   | A           | 34° 40'24" N / 82° 49'44" W | 429               | 1                  | 906011062                                   | SE8C     | CU        | A      |
| LBBLDCM1  | Lightsey Bridge Apartments Commons Building Transformer (N) | TS   | A           | 34° 40'28" N / 82° 49'39" W | 165               | 1                  | 94J640063                                   | SE8C     | CU        | A      |
| LBBLDCM2  | Lightsey Bridge Apartments Commons Building Transformer (S) | TS   | A           | 34° 40'28" N / 82° 49'39" W | 235               | 1                  | Q568332-TSS                                 | SE8C     | CU        | A      |
| LEE1      | Lee Hall Transformer  | TS   | A           | 34° 40'27" N / 82° 50'20" W | 128               | 1                  | H-8886659                                   | SE5C     | CU        | A      |
| LEHOTSK1  | Lehotsky Hall Transformer                                   | TS   | A           | 34° 40'28" N / 82° 50'07" W | 160               | 1                  | H-887891                                    | SE6C     | CU        | A      |
| LEVER1    | Lever Hall Transformer                                      | TS   | A           | 34° 40'38" N / 82° 49'52" W | 360               | 1                  | F-9636602                                   | SE7B     | CU        | A      |
| LITTLEJN1 | Littlejohn Coliseum Transformer                             | TS   | A           | 34° 40'46" N / 82° 50'48" W | 340               | 1                  | F-962191                                    | SE2A     | CU        | A      |
| LONG123   | Long Hall Transformers                                      | TS   | A           | 34° 40'42" N / 82° 50'02" W | 55                | 3                  | H243456P698/<br>H243454P698/<br>H243455P698 | SE6B     | CU        | A      |
| LOWRY1    | Lowry Hall Transformer                                      | TS   | A           | 34° 40'30" N / 82° 50'15" W | 290               | 1                  | C-858527                                    | SE5B     | CU        | A      |

| File Name | Description                                 | Type | UST/<br>AST | LAT/LONG                      | Size<br>(Gallons) | # of<br>Containers | Serial #'s   | Quadrant | Ownership | Status |
|-----------|---|------|-------------|-------------------------------|-------------------|--------------------|--------------|----------|-----------|--------|
|           |   |      |             |                               |                   |                    |              |          |           |        |
| MANNING1  | Manning Hall Transformer                    | TS   | A           | 34° 40'38" N/<br>82° 49'54" W | 360               | 1                  | F-958877     | SE7B     | CU        | A      |
| MARTN1DK  | Martin Inn Transformer<br>(Duke)            | TS   | A           | 34° 39'51" N/<br>82° 50'37" W | 302               | 1                  | 979008828    | SE3E     | DK        | A      |
| MCADAMS1  | McAdams Hall Trans-<br>former               | TS   | A           | 34° 40'29" N/<br>82° 50'05" W | 167               | 1                  | PCV-20606-01 | SE6C     | CU        | A      |
| OLIN1     | Olin Hall Transformer                       | TS   | A           | 34° 40'39" N/<br>82° 50'12" W | 383               | 1                  | 000334-VA    | SE5B     | CU        | A      |
| OUTTRK1   | Outdoor Track Trans-<br>former              | TS   | A           | 34° 40'21" N/<br>82° 51'03" W | 170               | 1                  | J930954T71AA | SE1C     | CU        | A      |
| PNTSHOP1  | Paint Shop Transformer                      | TS   | A           | 34° 40'47" N/<br>82° 50'28" W | 144               | 1                  | 137015938    | SE4A     | CU        | A      |
| RAV1DK    | Ravenal Center Trans-<br>former #1 (Duke) E | TS   | A           | 34° 41'13" N/<br>82° 51'55" W | 233               | 1                  | 2574361      | NW4A     | DK        | A      |
| RAV2DK    | Ravenal Center Trans-<br>former #2 (Duke) C | TS   | A           | 34° 41'13" N/<br>82° 51'55" W | 233               | 1                  | 2574362      | NW4A     | DK        | A      |
| RAV3DK    | Ravenal Center Trans-<br>former #3 (Duke) W | TS   | A           | 34° 41'13" N/<br>82° 51'55" W | 233               | 1                  | 2574560      | NW4A     | DK        | A      |
| RAV4DK    | Ravenal Center Trans-<br>former #4 (Duke) E | TS   | A           | 34° 41'13" N/<br>82° 51'55" W | 220               | 1                  | C05094-1-2   | NW4B     | DK        | A      |
| RAV5DK    | Ravenal Center Trans-<br>former #5 (Duke) W | TS   | A           | 34° 41'13" N/<br>82° 51'55" W | 220               | 1                  | C05094-1-1   | NW4B     | DK        | A      |
| REDFERN1  | Redfern Medical Center<br>Transformer       | TS   | A           | 34° 40'34" N/<br>82° 50'01" W | 290               | 1                  | F-963911     | SE6B     | CU        | A      |
| RHODES1   | Rhodes Engineering<br>Transformer           | TS   | A           | 34° 40'36" N/<br>82° 50'15" W | 360               | 1                  | F-964807     | SE5B     | CU        | A      |
| RICH1DK   | Rich Laboratory Trans-<br>former (Duke)     | TS   | A           | 34° 35'07" N/<br>82° 49'14" W | >55               | 1                  | P802495-TVE  | N/A      | DK        | A      |

| File Name | Description                                   | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s           | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|----------------------|----------|-----------|--------|
|           |   |      |             |                                |                   |                    |                      |          |           |        |
| RIGGS1    | Riggs Hall Transformer                        | TS   | A           | 34° 40'36" N /<br>82° 50'16" W | 280               | 1                  | 969007645            | SE5B     | CU        | A      |
| RUGBY1    | Rugby Field Transformer                       | TS   | A           | 34° 40'47" N /<br>82° 51'07" W | 200               | 1                  | 18052                | SE1A     | CU        | A      |
| RUST1DK   | RUST Technical Center<br>Transformer (Duke)   | TS   | A           | 34° 35'06" N /<br>82° 49'09" W | >55               | 1                  | P500171              | N/A      | DK        | A      |
| RVST1     | Ravenal Storage Yard<br>Transformer #1        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 140               | 1                  | 906005171            | NW5A     | CU        | S      |
| RVST10    | Ravenal Storage Yard<br>Transformer #10       | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 250               | 1                  | 85V5733              | NW6A     | CU        | S      |
| RVST2     | Ravenal Storage Yard<br>Transformer #2        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 135               | 1                  | 836003337            | NW6A     | CU        | S      |
| RVST3     | Ravenal Storage Yard<br>Transformer #3        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 135               | 1                  | 836003339            | NW6A     | CU        | S      |
| RVST4     | Ravenal Storage Yard<br>Transformer #4        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 135               | 1                  | 836003340            | NW6A     | CU        | S      |
| RVST5     | Ravenal Storage Yard<br>Transformer #5        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 135               | 1                  | 836003338            | NW6A     | CU        | S      |
| RVST6     | Ravenal Storage Yard<br>Transformer #6        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 58                | 1                  | P812983-TVF          | NW6A     | CU        | S      |
| RVST7     | Ravenal Storage Yard<br>Transformer #7        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 61                | 1                  | 838472785            | NW6A     | CU        | S      |
| RVST8     | Ravenal Storage Yard<br>Transformer #8        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 150               | 1                  | 18966                | NW6A     | CU        | S      |
| RVST9     | Ravenal Storage Yard<br>Transformer #9        | TS   | A           | 34° 41'02" N /<br>82° 52'10" W | 320               | 1                  | 85V5730              | NW6A     | CU        | S      |
| RWPMP1    | Raw Water Pumping Sta-<br>tion Transformer #1 | TS   | A           | 34° 40'50" N /<br>82° 51'17" W | 70                | 1                  | H337585P7388/<br>375 | SW1A     | CU        | A      |

| File Name | Description                                       | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s           | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|----------------------|----------|-----------|--------|
| RWPMP2    | Raw Water Pumping Station Transformer #2          | TS   | A           | 34° 40'50" N /<br>82° 51'17" W | 70                | 1                  | H343608P7388/<br>377 | SW1A     | CU        | A      |
| RWPMP3    | Raw Water Pumping Station Transformer #3          | TS   | A           | 34° 40'50" N /<br>82° 51'17" W | 70                | 1                  | H309609P7288/<br>378 | SW1A     | CU        | A      |
| SCHILET1  | Schilleter Dining Hall Transformer                | TS   | A           | 34° 40'37" N /<br>82° 49'59" W | 320               | 1                  | F-962663             | SE6B     | CU        | A      |
| SEASN1DK  | Seasons Restaurant Transformer (Duke)             | TS   | A           | 34° 39'58" N /<br>82° 50'37" W | 433               | 1                  | 946001711            | SE3E     | DK        | A      |
| SEED1DK   | South Carolina Seed Foundation Transformer (Duke) | TS   | A           | 34° 39'26" N /<br>82° 49'58" W | >55               | 1                  | UNAV                 | N/A      | DK        | A      |
| SIKES1    | Sikes Hall Transformer                            | TS   | A           | 34° 40'45" N /<br>82° 50'09" W | 90                | 1                  | G-857772             | SE6A     | CU        | A      |
| SLOAN1    | Sloan Tennis Courts Transformer                   | TS   | A           | 34° 40'56" N /<br>82° 50'23" W | 147               | 1                  | 94J660005            | SE4A     | CU        | A      |
| SOILN1DK  | Soil Nematode Laboratory Transformer (Duke)       | TS   | A           | 34° 39'26" N /<br>82° 49'57" W | >55               | 1                  | UNAV                 | N/A      | DK        | A      |
| STADIUM1  | Memorial Stadium Transformer (E)                  | TS   | A           | 34° 40'43" N /<br>82° 50'33" W | 118               | 1                  | 81JG494177           | SE4B     | CU        | A      |
| STDIUMNE  | Memorial Stadium Light Standard Transformer (NE)  | TS   | A           | 34° 40'46" N /<br>82° 50'33" W | 315               | 1                  | Q577319-TST          | SE4A     | CU        | A      |
| STDIUMNW  | Memorial Stadium Light Standard Transformer (NW)  | TS   | A           | 34° 40'45" N /<br>82° 50'40" W | 315               | 1                  | Q577322-TST          | SE3A     | CU        | A      |
| STDIUMSE  | Memorial Stadium Light Standard Transformer (SE)  | TS   | A           | 34° 40'43" N /<br>82° 50'32" W | 315               | 1                  | Q577321-TST          | SE4B     | CU        | A      |
| STDIUMSW  | Memorial Stadium Light Standard Transformer (SW)  | TS   | A           | 34° 40'41" N /<br>82° 50'38" W | 315               | 1                  | Q577320-TST          | SE3B     | CU        | A      |

| File Name | Description                                       | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s   | Quadrant | Ownership | Status |
|-----------|---|------|-------------|--------------------------------|-------------------|--------------------|--------------|----------|-----------|--------|
| THORNCM1  | Thornhill Community Center Transformer            | TS   | A           | 34° 40'39" N /<br>82° 49'38" W | 250               | 1                  | PO16990      | SE8B     | CU        | A      |
| TIWET1DK  | TIWET Building Transformer #1 (Duke)              | TS   | A           | 34° 38'23" N /<br>82° 46'24" W | >55               | 1                  | P498695      | N/A      | DK        | A      |
| TIWET2DK  | TIWET Building Transformer #2 (Duke)              | TS   | A           | 34° 38'24" N /<br>82° 46'20" W | >55               | 1                  | 906001414    | N/A      | DK        | A      |
| TNCTR1    | Tennis Center / Donaldson / Wanamaker Transformer | TS   | A           | 34° 40'53" N /<br>82° 50'22" W | 450               | 1                  | Q569179-TTS  | SE4A     | CU        | A      |
| TRUSCAL1  | Trustee House / Calhoun House Transformer         | TS   | A           | 34° 40'42" N /<br>82° 50'17" W | 55                | 1                  | 010301-4     | SE5B     | CU        | A      |
| UNION1    | University Union Transformer (W)                  | TS   | A           | 34° 40'45" N /<br>82° 50'21" W | 138               | 1                  | 444865       | SE5A     | CU        | A      |
| VISCTR1   | Visitors Center Transformer                       | TS   | A           | 34° 40'54" N /<br>82° 50'05" W | 133               | 1                  | 979007877    | SE6A     | CU        | A      |
| WASTE1DK  | Waste Treatment Transformer (Duke)                | TS   | A           | 34° 40'06" N /<br>82° 51'08" W | 210               | 1                  | 1597731097   | SE1D     | DK        | A      |
| WCAMPUS1  | West Campus Substation Transformer #1             | TS   | A           | 34° 40'46" N /<br>82° 50'26" W | 445               | 1                  | UBV4885-03   | SE4A     | CU        | A      |
| WCAMPUS2  | West Campus Substation Transformer #2             | TS   | A           | 34° 40'46" N /<br>82° 50'27" W | 445               | 1                  | UBV4885-01   | SE4A     | CU        | A      |
| WCAMPUS3  | West Campus Substation Transformer #3             | TS   | A           | 34° 40'46" N /<br>82° 50'27" W | 422               | 1                  | UBV5909-0101 | SE4A     | CU        | A      |
| WCAMPUS4  | West Campus Substation Transformer #4             | TS   | A           | 34° 40'46" N /<br>82° 50'27" W | 424               | 1                  | UBI2677-001  | SE4A     | CU        | X      |
| WCAMPUS5  | West Campus Substation Transformer #5             | TS   | A           | 34° 40'46" N /<br>82° 50'27" W | 1490              | 1                  | 990104-A1    | SE4A     | CU        | A      |
| WCAMPUS6  | West Campus Substation Transformer #6             | TS   | A           | 34° 40'47" N /<br>82° 50'27" W | 445               | 1                  | UBV4885-08   | SE4A     | CU        | A      |

| File Name | Description                                    | Type | UST/<br>AST | LAT/LONG                       | Size<br>(Gallons) | # of<br>Containers | Serial #'s  | Quadrant | Ownership | Status |
|-----------|--|------|-------------|--------------------------------|-------------------|--------------------|-------------|----------|-----------|--------|
|           |  |      |             |                                |                   |                    |             |          |           |        |
| WESTCAM1  | West Campus Housing Transformer                | TS   | A           | 34° 40'40" N /<br>82° 50'28" W | 270               | 1                  | Q558707-TTR | SE4B     | CU        | A      |
| WTBLOW1   | Waste Treatment Blower Transformer             | TS   | A           | 34° 40'05" N /<br>82° 51'04" W | 185               | 1                  | P179732TVB  | SE1D     | CU        | A      |
| WTNL1BR   | Windtunnel Transformer #1 (Blue Ridge)         | TS   | A           | 34° 41'19" N /<br>82° 52'02" W | 208               | 1                  | 0037017298  | NW5B     | BR        | A      |
| WTNL2BR   | Windtunnel Transformer #2 (Blue Ridge)         | TS   | A           | 34° 41'19" N /<br>82° 52'02" W | 210               | 1                  | Q103904-TUG | NW5B     | BR        | A      |
| ATHWSTOL  | Athletic Department Waste Oil Tank             | WT   | A           | 34° 40'20" N /<br>82° 51'08" W | 250               | 1                  | N/A         | SE1C     | CU        | S      |
| FORWSOIL  | Forestry Field Services Waste Oil Tank         | WT   | A           | 34° 41'21" N /<br>82° 52'12" W | 250               | 1                  | N/A         | NW6B     | CU        | S      |
| GCMNTOIL  | Golf Course Maintenance Facility Used Oil Tank | WT   | A           | 34° 40'14" N /<br>82° 50'12" W | 250               | 1                  | N/A         | SE5D     | CU        | S      |
| MNTUSED   | Landscaping / Maintenance Used Oil Tank        | WT   | A           | 34° 40'17" N /<br>82° 50'25" W | 500               | 1                  | N/A         | SE4C     | CU        | S      |
| MPUSED1   | Motor Pool Used Oil Tank #1                    | WT   | A           | 34° 40'49" N /<br>82° 50'27" W | 250               | 1                  | N/A         | SE4A     | CU        | S      |
| MPUSED2   | Motor Pool Used Oil Tank #2                    | WT   | A           | 34° 40'49" N /<br>82° 50'27" W | 250               | 1                  | N/A         | SE4A     | CU        | S      |
| RECYWST   | Recycling Center Waste Oil Tank                | WT   | A           | 34° 40'44" N /<br>82° 49'17" W | 250               | 1                  | N/A         | SE10B    | CU        | S      |
| SRWSTOIL  | Simpson Research Center Waste Oil Tank         | WT   | A           | 34° 37'24" N /<br>82° 43'32" W | 1000              | 1                  | N/A         | N/A      | CU        | S      |