# **Management Approval/Certification Statement**

#### **Management Approval**

This SPCC plan will be implemented as described herein with the full concurrence and commitment of Drexel University. All levels of management and operating personnel are required to support the intent and procedures as set forth in this document.

This approval extends to the commitment of manpower, equipment, and materials required to expeditiously control and remove any harmful quantity of petroleum-based substances which may be spilled on University property and/or which may be discharged to nearby navigable waterways.

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This plan shall be reviewed every five changes made in regulations.	e (5) years and changes made accordingly with
Signature	
Title	Dete
Tiue	Date
Certi	ification Statement
	the subject facility, and being familiar with the that the following plans have been prepared in practice normal and usual to the area
Signature	
Registration Number	

# **Emergency Contact Information**

Drexel University Public Safety Office	Emergency: 895-2222
	Non-emergency: 895-2889
Department of Environmental Health and	Diana Dukes: 895-5907
Safety	Jonathan Chase: 895-5891
	Phillip Leo: 895-5909
	Martin Bell: 895-5891
Facilities Administration	Work Order Control: 895-2808
Spill Cleanup Firms	Clean Harbors: (800) 645-8265
Pennsylvania DEP, Southeast region	(610) 832-6242
Regional III U.S. Environmental Protection	(800) 438-2474
Agency	
National Response Center	(800) 424-8802 (within 2 hours of oil
	entering surface water)
Fire/Police/Ambulance	Dial 9-911

# **Facility Information**

**Facility Name:** Drexel University

**Type of Facility:** Educational Institution

Oil Related Facility: Fuel Oil Storage Tanks

Total Underground Storage Tank (UST) Capacity: 18,550 Gallons Total Aboveground Storage Tank (AST) Capacity: 7,715 Gallons

**Street Address:** 3141 Chestnut Street

Philadelphia, PA 19104

**Owner:** Drexel University

3141 Chestnut Street Philadelphia, PA 19104

**Contact:** Jonathan Chase

Director, Department of Environmental Health and Safety

400 N. 31<sup>st</sup> Street

Philadelphia, PA 19104

(215) 895-5891

**Location:** The Main Campus of the University is located in West

Philadelphia and generally covers the area west of I-76 to 34<sup>th</sup> street. The facility is an educational institution, which handles fuel oil to power emergency generators, fire pumps and boilers located in various buildings throughout the property. A University Map is presented as **Figure 1.** The Queen Lane Campus is located at 2900 Queen Lane Avenue off of Kelly Drive. The third building with storage tanks is located on the Center City Campus at 219

North Broad Street in Philadelphia.

**Oil Spill History:** The facility has not had a spill in the last 12 months.

Water/Drainage: The Philadelphia Water Department provides water for this

facility. There are storm drains located throughout the University campus, which are connected to the municipal storm sewer system, which ultimately reach the Southwest Water Pollution Control Project (WPCP) in Philadelphia. Schuylkill River is the nearest

receptor and is located within a mile east of the facility.

#### Fuel System Overview and Spill Release Potential

There are twenty-seven (31) active aboveground storage tank (AST) systems and four (4) active underground storage tank (UST) systems located at this facility with an aggregate capacity of 25, 715 gallons of petroleum products. There is one (1) inactive underground storage tank (UST) located at this facility with a capacity of 550 gallons. There is one (1) inactive above ground storage tank (AST) located at this facility with a capacity of 6,000 gallons. The tank systems are located in buildings shown on Figure 1. The tank material and construction are compatible with the products stored and conditions of storage (i.e., pressure, temperature, etc.). The tank systems are monitored with monitoring systems, and/or on-tank gauges and high-level alarms.

As part of the SPCC Plan, the AST's will be subject to periodic visual inspections to asses the integrity of the tanks. The outside of the AST's will be observed by personnel for signs of deterioration, leaks, or accumulation of oil inside the secondary containment structures. In addition, all aboveground valves and pipelines will be subject to regular examinations by personnel, at which time the general condition of items, such as catch pans, pipeline supports, locking of valves, and metal surfaces will be assessed.

A listing of the fuel types, storage systems and transfer operations present at the University is presented in Table 1 below.

<u>Table 1</u> Tank Descriptions

Building	Capac ity	Type	Product	Location	Fuel Transfer Operations
North Tower (33 <sup>rd</sup> & Race)	3,000	UST	No.4 Fuel Oil	Outside	UST>Boiler
Peck Center (32 <sup>nd</sup> & Market)	(2) 275	AST	No.4 Fuel Oil	Basement	AST>Boiler
General Services Building (3141	1,000	UST	Gasoline	Outside	UST>Pump>Vehicles
Chestnut St.) Lebow/CAT Building (3100 Market St.)	1,000	AST	Diesel	Basement	AST>Day Tank
Lebow/CAT Building (3100 Market St.)	150	AST	Diesel	Penthouse Mechanical	Day Tank>Generator
Myers Hall (3305 Race St.)	175	AST	Diesel	Ground level mechanical	AST>Generator
Hagarty Library (300 Market St.)	(2) 275	AST	Diesel	Basement	AST>Generator
New Tower	150	AST	Diesel	Outside	AST>Generator
Van Rennselier Dormitory (33 <sup>rd</sup> & Powelton Ave)	150	AST	Diesel	Outside	AST>Generator
Calhoun Hall (33 <sup>rd</sup> & Arch St.)	150	AST	Diesel	Outside	AST>Generator
East Hall (101 31st Street)	75	AST	Diesel	Basement	AST>Generator
East Hall	150	AST	Diesel	Outside	AST>Generator
Security (118 N. 34 <sup>th</sup> Street)	75	AST	Diesel	Outside	AST>Generator
North Tower (33 <sup>th</sup> & Cherry St.)	105	AST	Diesel	Basement	AST>Fire Pump
North Tower	150	AST	Diesel	Outside	AST>Generator
East Hall	105	AST	Diesel	Basement	AST>Fire Pump
Nesbitt Hall	105	AST	Diesel	Basement	AST>Fire Pump
Disque Hall (32 <sup>nd</sup> & Market Street)	105	AST	Diesel	Basement	AST>Fire Pump
Alumni Building	550	UST	Gasoline	Basement Vault	Inactive
Myers Hall	30	AST	Oil	Basement	AST>Elevator Pump
Creese Hall	30	AST	Oil	Basement	AST>Elevator Pump
Rush Building	30	AST	Oil	Basement	AST>Elevator Pump
Datakis Gym	30	AST	Oil	Basement	AST>Elevator Pump
Haggerty Library	30	AST	Oil	Basement	AST>Elevator Pump
Haggerty Library	30	AST	Oil	Basement	AST>Elevator Pump
Haggerty Library	30	AST	Oil	Basement	AST>Elevator Pump
General Services Building	30	AST	Oil	Basement	AST>Elevator Pump
General Services Building	30	AST	Oil	Basement	AST>Elevator Pump
North Tower	30	AST	Oil	Basement	AST>Elevator Pump
North Tower	30	AST	Oil	Basement	AST>Elevator Pump
North Tower	30	AST	Oil	Basement	AST>Elevator Pump
LeBow Building	30	AST	Oil	Basement	AST>Elevator Pump
Peck Center Creese Center	30 100	AST	Oil	Basement Outside	AST>Elevator Pump
		AST	Cooking Oil		Fryers>Holding Tank (manual transfer)
General Services Building	200	AST	Used Motor Oil	1 <sup>st</sup> floor Garage	Vehicles>50 gal. Drums (manual transfer)
Queen Lane Campus Wing C	10,000	UST	Heating Oil	Wing C	UST>Boilers
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Queen Lane	4,000	UST	Heating Oil	Wing E	UST>Boilers
Campus Wing E					
219 North Broad	275	AST	Heating Oil	Basement	AST>Boiler
Street					
219 North Broad	275	AST	Heating Oil	Basement	AST>Boiler
Street			-		
219 North Broad	500	AST	Diesel	Basement	AST>Generator
Street					
219 North Broad	300	AST	Diesel	Basement	AST>Fire
Street					pump
219 North Broad	6,000	AST	Heating Oil	Basement	Inactive
Street					

Table 2Spill Release Potential

Lebow 1,000 gallon AST

, ,	Rate	Volume
Tank Rupture	Instantaneous	1,000 gal.
Tank Overfill	Instantaneous	25 gal.
Pipe Rupture	5 gal/min	1,000 gal.

Lebow 150 gallon day tank

	Rate	Volume
Tank Rupture	Instantaneous	150 gal
Tank Overfill	Instantaneous	25 gal
Pipe Rupture	5 gal/min	150 gal

Peck Center (2) 275 gallon AST

	Rate	Volume
Tank Rupture	Instantaneous	275 gal
Tank Overflow	Instantaneous	25gal
Pipe Rupture	5 gal/min	275 gal

Myers Hall 175 gallon AST

	Rate	Volume
Tank Rupture	Instantaneous	175 gal
Tank Overflow	Instantaneous	25 gal
Pipe Rupture	5 gal/min	175 gal

Hagerty Library (2) 275 gallon AST

	Rate	Volume
Tank Rupture	Instantaneous	275 gal
Tank Overflow	Instantaneous	25 gal
Pipe Rupture	5 gal/min	275 gal

New Tower (2), Van Rennselier, Calhoun, East Hall 150 gallon AST

	Rate	Volume
Tank Rupture	Instantaneous	150 gal
Tank Overflow	Instantaneous	25 gal
Pipe Rupture	5 gal/min	150 gal

North Tower, East Hall, Nesbitt Hall 105 gallon Fire Pump AST

	Rate	Volume
Tank Rupture	Instantaneous	105 gal
Tank Overflow	Instantaneous	25 gal
Pipe Rupture	5 gal/min	105 gal

Security Building 75 gallon AST

	Rate	Volume
Tank Rupture	Instantaneous	75 gal
Tank Overflow	Instantaneous	15 gal
Pipe Rupture	5 gal/min	75 gal

Creese Center 100-gallon grease AST

	Rate	Volume
Tank Rupture	Instantaneous	100 gal
Tank Overflow	Instantaneous	15 gal

In most instances, giving the grading of the land on University property, fuel products that get outside building areas would flow in an easterly direction toward street storm sewers and the Schuylkill River. In instances inside of building spaces, the flow of spilled fuel products would flow to floor drains within the buildings that are connected to the storm sewer system. In these cases, snorkels have been placed on floor drains to allow for the drainage of water while inhibiting the drainage of spilled fuel products to the storm sewers.

# **Fuel Truck Unloading Procedures**

Tank truck unloading occurs at several locations on-site. The tanks are filled by one of the following methods:

- 1. A fill pipe located directly above the tank (UST only)
- 2. A fill pipe along the street next to the building (UST or AST)
- 3. A fill pipe on the side of the AST/Generator Unit

The University will stress the importance of following safe handling practices when delivering products to the various sites. Tank truck unloading procedures will meet the minimum requirements instituted by the United States Department of Transportation.

The fuel supplier shall notify Drexel University Facilities group upon arriving on site. The fuel supplier will provide the systems necessary to prevent product from reaching streets, catch basins, or other drainage structures during product transfers. The University will ensure that the fuel supplier prevents spills and overfills from occurring during the petroleum transfers. The fuel supplier will provide such systems as absorbent material, drain covers. See **Appendix A** for notice to tank truck drivers.

Prior to fueling, facilities management personnel will meet the fuel truck operator at the tank location. Facilities management personnel will check the tank level to confirm the volume of fuel to be delivered to the tank. The fuel truck operator will be present during delivery and take an active part in the prevention of spills. Facilities Management personnel will stay in contact with the fuel truck operator during the refueling process and notify the driver immediately of any leaks that occur to the tank or associated piping. The fuel supplier will take immediate action to stop the flow of petroleum when the working capacity of the tank has been reached, or when an emergency, or spill occurs. Warning signs and chock blocks will be utilized to prevent vehicular departure before disconnecting the fuel transfer lines. Prior to filling and departure of any tank truck, the lowermost drain and all outlets of such vehicle will be closely examined for leakage, and if necessary, tightened, adjusted, or replaced to prevent liquid leakage while in transit.

Upon completion of fueling, Drexel University Facilities group will visually inspect the fill pipe and area around the fill pipe for any spilled petroleum. The Facilities group will also confirm the volume of petroleum with the fuel supplier distributed to each tank during a refueling operation. Facilities Management personnel will sign off with the date of delivery on the refueling ticked. A copy will be kept on file at the Facilities Management office. This file will be inspected quarterly to ensure that refueling tickets are signed and dated. See **Appendix B** for notice to facilities management group.

An overfill occurring during tank truck unloading has the potential to reach the municipal storm sewers. In the event of a spill, the storm sewers located in the flow path will be protected by immediately placing sorbent booms or covers in these areas.

### **Fuel Transfer Operations**

The transfer of product once delivered to the University occurs through both underground and aboveground piping. Product is delivered to the UST's by gravity through fill pipes located above the tanks or remote fill pipes located in the sidewalk. The AST's are filled via remote fill pipes only. The product travels from the tanks through piping located underground to the building and aboveground once inside the building. The underground piping is constructed of steel. The above wall piping is constructed of either single wall steel or double wall steel with fiberglass secondary containment.

Product is transferred through aboveground piping to the mechanical components being fueled. If the tank system is feeding a mechanical component on another floor level, the fuel transfer is accomplished through a pump system. These pumps are contained within

steel secondary containment trays. All piping supports are installed in a manner, which minimizes abrasion and corrosion and allows for expansion and contraction.

#### **Spill Response Procedures**

Upon observing a spill, personnel on the scene will take immediate action to contain the spill and prevent product from reaching a drain (e.g. floor drain or storm water drain). Personnel will immediate call the Drexel Security Emergency Number. Drexel Security will notify Environmental Safety and Health personnel, who will initiate the appropriate response and make the necessary regulatory contacts.

Drexel Security Emergency Number: (215) 895-2222

The spill containment action may require the manual application of sorbent materials to prevent product from reaching the drains. Site personnel are committed to performing spill prevention activities to support this plan, unless an unsafe condition has been created by a spill. In the event that there is an immediate danger to human life, site personnel will contact **911**.

When reporting a spill, the following information must be supplied:

- (1) Name of Person Making Call
- (2) Material and Quantity Involved
- (3) Building Name
- (4) Location of Spill in Building
- (5) Telephone Number for Personnel Observing Scene

If a spill is found to discharge into any drain, Southwest Water Pollution Control Project (WPCP) in Philadelphia must be contacted. During peak flows, heavy rainstorms, it is possible to have some portion of the wastewater from Southwest Water Pollution Control Project to be discharged to the Schuykill River.

Any spill, which causes a sheen or visible layer of oil on a U.S Navigable waterway, must be reported verbally to the National Response Center.

National Response Center 24-hour Hotline: (800) 424-8802

This satisfies the requirement for notifying both the USEPA and the U.S. Coastguard. The Environmental Safety and Health Department personnel are responsible for making this notification.

As per 40 CFR Part 112.4, if the volume of the spill exceeds 1,000 gallons, or if two (2) oil spills over forty –two gallons (42) occur within a twelve (12) month period since the

last inspection, additional reporting procedures are required. Environmental Safety and Health personnel will perform these reporting procedures. The additional reporting requirements consist of submitting a report to the United States Environmental Protection Agency (EPA) Regional Administrator describing the spill incident, the measures taken to mitigate/remediate the spill, and the mechanisms that have been or will be instituted to prevent a reoccurrence. This report must be submitted within sixty (60) days of the incident.

Spill kits, booms, pillows and mats will be placed directly adjacent to tanks, pumps and piping for immediate application following spills or leaks. At a minimum, there will be an adequate supply to respond to a spill of 30 gallons. Further, the sorbent materials will be appropriate for the collection of fuel/oil. The inventory of spill kits will include:

- Rolls and pads of absorbent materials
- Granular absorbent material
- Shovels, squeegees, boots, gloves and eye protection
- Overpack drums to place used spill materials in for waste disposal

#### **Spill Contractors**

Clean Harbors: (800) 645-8265

### **Inspections and Records**

As part of the SPCC Plan, inspection of the facility and training of the facility personnel will be performed by the University. The Storage Tank Inspection Form used for the tank inspections is contained in **Appendix C**. The record of the inspections, signed by the appropriate supervisor or inspector will be made part of the SPCC Plan and maintained for a period of three (3) years.

The SPCC Plan will be reviewed and evaluated every five (5) years. If amendments are required as a result of the review, the plan will be amended within six (6) months and recertified by a professional engineer.

Facilities Management will inspect the AST and UST tanks on a monthly basis. Copies of inspection report will be kept on site. A copy of the inspection report shall also be forwarded to University Safety. Inspection reports will include those recommendations necessary to comply with SPCC requirements. The inspection reports for the past year for the storage tanks will be attached to the SPCC plan. The inspections will focus on potential spill sources, such as AST's, tank supports and foundations, secondary containment, fuel unloading areas, petroleum product piping, valves, pumps, grounding

equipment, fire extinguishers, and suppression systems. Any visible fuel leak sufficiently large to cause the accumulation of fuel in diked areas will promptly be corrected. In addition, a complete record of any spills that occur will be maintained at the facility.

Personnel will be trained in the operation and maintenance of equipment to prevent fuel/oil discharges and also in applicable pollution control laws, rules and regulations. University Safety will maintain a record of the sign-in sheets and topics covered in the training sessions. See **Appendix** C for training sign in sheets. Training will be conducted annually and include such topics as tank inspection procedure, spill reporting procedure, use of spill control materials, fuel truck unloading procedures and hazard communication on tank contents.

### **Security**

Access to the Drexel University campus is restricted to employees, students, and visitors. The University Public Safety Office is operational 24-hours a day and its security officers and 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 personnel or other specially trained or authorized personnel through the use of key controlled locked storage areas, locked generator covers on exterior generators and locked fencing around exterior above ground storage tanks.

There is no accessible master flow or drain valves that would permit direct outward flow of the bulk tank contents. The oil transfer pumps throughout this facility are located inside rooms accessible only to authorized personnel. All piping and connections at this facility are in service and should not be capped or blank flanged.

All fill caps on both AST and UST shall be locked at all times. All access panels on exterior generators shall remain locked at all times. Spaces that house interior AST and UST shall remain locked at all times. Only authorized parties have access to those spaces.

The facility is commensurate with the type and location of the 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

# Appendix A

#### **Notice to Tank Truck Drivers**

To prevent the release of substances hazardous to the environment, tank truck drivers entering this site are to comply with the following rules:

- 1. Exercise caution when maneuvering to avoid damage to University property.
- 2. Inspect tank, fittings, and liquid level indicator prior to filling or confirm level with onsite facilities personnel.
- 3. Place drip pans under all pump hose fittings prior to loading/unloading.
- 4. Block truck wheels before starting to load/unload.
- 5. Remain with vehicle while loading/unloading.
- 6. Drain loading/unloading line to storage tank when fueling is complete.
- 7. Verify that all drain valves are closed before disconnecting loading/unloading lines.
- 8. Inspect vehicle before departure to be sure all loading/unloading lines have been disconnected and vent valves closed.
- 9. Immediately report any leakage or spillage to University Safety (215) 895-2222, or onsite University personnel.

# **Appendix B**

#### **Notice to Facilities Department Personnel**

To prevent the release of materials during the refueling process designated facilities department personnel shall comply with the following procedures:

- 1. Designated facilities department personnel shall meet with the refueling truck driver at the tank location prior to any refueling activity.
- 2. The designated person will either check the tank level or ensure that the fuel truck driver checks the tank level to confirm the amount to be delivered.
- 3. The designated person will stay in contact with the fuel truck driver during the refueling process and notify the driver immediately of any leaks in the tank or associated pipe work.
- 4. The designated person will sign off on the refueling ticket. A copy of the ticket will be kept on file at the Facilities Management office. The file will be reviewed quarterly.