WESTERN CONNECTICUT STATE UNIVERSITY

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

PROCEDURE E-104

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1.0 INTRODUCTION

Title 40 of the Code of Federal Regulations Part 112.1 (40 CFR 112.1) requires that facilities with a potential to discharge oil to a navigable water, and with either an aggregate aboveground oil storage capacity in excess of 1,320 gallons or underground storage in excess of 42,000 gallons (not covered by other Federal/State underground storage regulations), prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan. These regulations apply to all oil storage containers or oil-bearing equipment with capacities of 55 gallons or more. The purpose of the SPCC Plan is to minimize the potential for oil discharge into or upon the navigable waters of the United States and their adjoining shorelines. The definition of oil includes, but is not limited to, fuel oils, vegetable oils, and mineral oil dielectric fluid (MODF) used in oil-bearing electrical equipment. Discharge includes, but is not limited to, the potential to spill, leak, pump, pour, or emit. Discharge, as defined by the regulations, does not include an oil discharge authorized under a current National Pollutant Discharge Elimination System (NPDES) permit.

This Plan describes the activities conducted by Western Connecticut State University to comply with SPCC requirements at the Midtown and Westside Campuses located in Danbury, Connecticut. This SPCC Plan was prepared in accordance with 40 CFR 112.7.

1.1 GENERAL INFORMATION

Western Connecticut State University is a liberal arts university with two campuses, Midtown and Westside, located in Danbury, Connecticut, as shown in Figure 1. It was established in 1903 and has a strong curriculum in business, arts and sciences, and professional studies. Western Connecticut State University is part of the Connecticut State University System, and has undergraduate and graduate students enrolled at the Danbury campuses. Campus housing for students consists of three dormitories at the Midtown Campus and two dormitories at the Westside Campus. The Midtown campus consists of sixteen classroom, dormitory, athletic, and administration buildings. Buildings at the Midtown Campus are heated by steam produced at a central power plant (referred to as the Boiler House). The Westside campus consists of six classroom, dormitory, athletic, and administration buildings. Westside Campus buildings are heated by steam generated by boilers using heating oil. Both campuses, and surrounding areas, are served by municipal water and sewer.

Oil storage areas and/or oil-bearing equipment at the campus include aboveground storage tanks (ASTs) and underground storage tanks (USTs) used for comfort heating applications, central power plant operations, and maintenance activities; oils and lubricants stored in the Midtown and Westside maintenance shops; emergency generators and fire pumps with fuel tanks; hydraulic elevators; and electrical transformers at some of the campus buildings. Locations of oil storage areas and/or oil-bearing equipment are shown on Figures 2 and 3.

1.2 ENVIRONMENTAL POLICY

Western Connecticut State University is committed to compliance with applicable environmental laws, regulations, and public policies dealing with the responsible use and preservation of natural resources. Western Connecticut State University has developed policies for the handling of

hazardous and special wastes and the implementation of appropriate responses in the event of the release of injurious substances into the environment. It is every employee's responsibility to be aware of and sensitive to the ways that individual activities could impact the environment and to assist in ensuring the highest degree of environmental responsibility that can reasonably be attained.

1.3 SPILL PREVENTION POLICY

It is the policy of Western Connecticut State University to conduct operations at the campuses in an environmentally safe and responsible manner. To achieve this, Western Connecticut State University is committed to compliance with local, state, and federal environmental laws and regulations. This policy is intended to be implemented through active safety programs, well-designed and maintained facilities, well-trained employees, and appropriate emergency response planning, including maintaining adequate response equipment.

The SPCC Plan is designed to achieve two goals. The first is to minimize the potential for an oil discharge; the second is to minimize the threat to the environment and human health in the event of a fire, explosion, or oil discharge. This SPCC Plan documents the combination of systems and procedures used to achieve these goals. It is the responsibility of all affected employees to be familiar with this SPCC Plan and follow the safety procedures. In the event of an incident, it is the responsibility of affected employees to use the emergency response and notification procedures provided in Appendix A. These procedures are designed to ensure spilled materials that may pose a threat to human health and the environment are properly reported to appropriate agencies and remediated, as required by law.

1.4 GENERAL RESPONSE

Western Connecticut State University's general spill response procedures are included in Appendix A. The reporting and cleanup procedures are updated, as necessary (e.g., change in personnel, change of telephone numbers). For any spill scenario, the general procedures presented in the flow chart in Figure 4 will be employed by Western Connecticut State University personnel. Oil spill report forms needed to document spills are in Appendix B.

1.5 PLAN ORGANIZATION

This SPCC Plan is divided into five sections plus Appendices. The Introduction, included in Section 1, discusses the purpose of this Plan, University policy, and general spill response procedures. Section 2 presents specific information for oil storage tanks and oil-bearing equipment, including location, site description, site security, potential drainage pathways, spill prevention measures, and spill history. Section 3 describes the spill prevention and response training Western Connecticut State University employees receive and related standard operating procedures. Descriptions of the inspection and record keeping procedures are presented in Section 4, and the Professional Engineer's certification for this Plan is in Section 5.

Appendices to this SPCC Plan include:

Appendix A Oil and Hazardous Material Spill Reporting and Cleanup Procedures;
Appendix B Oil Spill Report Form;
Appendix C Monthly Tank System Inspection Checklists;
Appendix D SPCC Plan Annual Review Sheet;
Appendix E Receiving Oil Deliveries;
Appendix F Contractor Emergency Procedures;
Appendix G Draining Stormwater from Containment Structures;
Appendix H Containment Calculations;
Appendix I Oil Spill Correspondence;
Appendix J Storage Tank Registration Forms;
Appendix K SPCC Plan Personnel Training List; and
Appendix L Cathodic Protection O&M and Survey Reports.

2.0 OIL STORAGE AREAS AND OIL-BEARING EQUIPMENT

Western Connecticut State University has defined six principal areas where oil storage exists on its campuses, which are as follows:

- Midtown Campus buildings
- Westside Campus buildings
- Westside Campus Maintenance Shop
- Emergency Generators and Fire Pumps
- Hydraulic Elevators
- Electrical Transformers

Locations of principal oil storage areas and oil-bearing equipment are shown in Figures 2 and 3. Information regarding the major oil storage areas and oil-bearing equipment, including location, site description, oil quantities, site security, potential drainage pathways, spill prevention measures, potential spill scenarios, and spill history, are provided separately in the subsections below.

Western Connecticut State University has various oil and petroleum products stored throughout the campus. A central facility, referred to as the Boiler House, provides the buildings at the Midtown Campus with steam for heating, as well as hot water. The Boiler House has storage tanks with the largest individual capacities on both campuses. At the Midtown Campus, there is also a 300-gallon AST for used cooking oils located in the parking area north of White Hall. Buildings at the Westside Campus have individual oil storage tanks for comfort heating purposes.

There are also several diesel-powered emergency generators, diesel-powered fire pumps, and hydraulic elevators located throughout the campuses that contain various amounts of oil. Transformers are also located at the Western Connecticut State University campuses, and included in this SPCC Plan for completeness. However, Western Connecticut State University does not own or operate the transformers, and cannot institute containment measures.

In addition, Western Connecticut State University has miscellaneous oil storage and oil-bearing equipment located throughout the Midtown and Westside Campuses, which include air compressors, cooking oils, vacuum pumps, compactors, and art supplies. The typical capacities of the miscellaneous oil storage containers and oil-bearing equipment is one quart to five gallons, with a maximum capacity of up to 20 gallons in trash compactor units. The miscellaneous oil storage containers and oil-bearing equipment are not covered by 40 CFR 112, and are briefly discussed below for completeness.

The classroom and residence (i.e., dormitory) buildings have air compressors to operate pneumatic controls in the buildings, such as automatic doors. These compressors are located in building mechanical rooms, and contain approximately 1 gallon of oil in each unit. Adequate oil containment for these units is provided by the rooms. Also, campus Physical Plant personnel frequently observe the compressors and inspect the units for drips and leaks. Released oil is cleaned up and the equipment repaired as soon as practicable. Drip pans or absorbent materials may be used to contain drips and leaks until the repairs can be made.

Cooking oils (e.g., vegetable shortening and salad oil) are used and stored at University cafeterias, which are located in the Student Center (Midtown Campus) and Pinney Hall (Westside Campus). The sink and floor drains in the cafeterias are equipped with grease traps to prevent oil and grease entering the Danbury sewer system. When the oil in fryers is changed, used cooking oil is transferred to the AST (described in Section 2.A) for removal by a contractor. The cafeterias typically transfer less than 10 gallons of used cooking oil at a time. The container of used cooking oil may be temporarily stored in a spill containment pan at the building loading dock prior to transfer to the AST.

The science laboratories in Higgins Hall and Higgins Annex have approximately 15 small compressors and vacuum pumps for use in teaching and research. These units may have up to 1 gallon of oil each; adequate oil containment is provided by the rooms. Also, students, staff, and faculty frequently observe these units and inspect the units for drips and leaks. Released oil is cleaned up and the equipment repaired as soon as practicable. Drip pans or absorbent materials may be used to contain drips and leaks until the repairs can be made.

Large trash compactors for University rubbish collection are located in the parking area north of White Hall (at the Midtown Campus) and at Pinney Hall (at the Westside Campus). The compactors contain approximately 20 gallons of hydraulic oil. These units are located on paved areas with sufficient distance from stormwater catch basins to provide containment. Campus personnel frequently observe the compactors and inspect the units for drips and leaks. Released oil is cleaned up and the equipment repaired as soon as practicable. Drip pans or absorbent materials may be used to contain drips and leaks until the repairs can be made.

Art supplies that may be consider oil under the SPCC regulations are stored and used in the Art Department at White Hall. These supplies are kept in a flammable materials locker with integral containment when not in use. When used, the quantity of product needed for a project is transferred to a smaller container and brought to where it is needed. Art studios in the building provide adequate containment for the quantities used. Spills are cleaned up as soon as practicable.

2.A MIDTOWN CAMPUS BUILDINGS

2.A.1 Site Location

The 16 buildings located throughout the Midtown Campus include the academic, administration/support, dormitory, and maintenance/physical plant buildings. Academic buildings consist of the Arts, English, Theatre, Humanities, and Sciences, located in White Hall, Warner Hall, Berkshire Hall, and Higgins Hall (including Higgins Annex), respectively. Administration buildings are the Old Main Hall and University Hall. Dormitory buildings include Fairfield, Litchfield, and Newbury Halls. Support buildings include Haas Library (the campus library), Alumni Hall, the Student Center, and the Midtown Parking Garage. Midtown Campus maintenance and physical plant are located in the same building (with the Campus Police Department), which is referred to as the Boiler House. The Boiler House provides the buildings at the Midtown Campus with steam for heating, as well as hot water. Midtown Campus buildings do not have separate oil storage for heating purposes.

Primary oil storage at the Midtown Campus is at the Boiler House, which may use either natural gas or No. 2 fuel oil to generate steam to heat the buildings at the Midtown Campus, as well as provide hot water. In addition, primary oil storage for maintenance equipment, which consists of fuels, lubricants, and used oil, is in the Fuel Storage Shed located adjacent to the Boiler House.

In addition, a 300-gallon AST for used cooking oils is located in the parking area north of White Hall. Other oil storage and/or oil-bearing equipment in Midtown Campus buildings are discussed in the equipment-specific sections of this Plan (i.e., Sections 2D through 2H).

2.A.2 Site Description

Primary oil storage at the Midtown Campus is located in or adjacent to the Boiler House. The boilers that provide steam for heating other campus buildings are located in the middle of this building. The north side of the building provides office space for the campus Police Department. The south side of the building provides office and storage space for campus maintenance operations. A portable flammable materials shed that is used to store fuel and lubricants for maintenance operations is located west of the Boiler house.

There are two underground storage tanks (USTs) located adjacent to the eastern side of the Boiler House that supply No. 2 fuel oil to the boilers. The USTs each have a 25,000-gallon capacity and are interconnected, so they are filled through a common fill port and emptied simultaneously. Pumps located inside the Boiler House supply fuel oil from the USTs directly to the boilers and the hot water heater. Piping from the USTs to the pumps is located underground

and piping from the pumps to the boilers and hot water heater is located in concrete troughs cast into the Boiler House floor. The USTs and piping are double-walled and constructed of steel, which is compatible with the stored fuel. The USTs and piping also have cathodic protection, and the sacrificial anodes were renewed in June 2002.

Campus maintenance equipment and supplies are stored in the two garage bays and adjoining areas located in the southern portion of the Boiler House. This equipment includes a diesel-powered forklift, lawnmowers, and other lawn care equipment. Other than fuel and oil in the equipment, no oil is stored in the maintenance area.

The Fuel Storage Shed is a portable flammable materials building with integral containment that measures approximately 8 feet by 8 feet and 7 ½ feet high. Fuel, oil, and grease for campus maintenance operations are stored in the Fuel Storage Shed. A 275-gallon above ground storage tank (AST) for diesel fuel, equipped with a fuel dispenser, is located in the shed. Additional oil stored in the shed include a 55-gallon drum for lubricating oil, a 55-gallon drum for used oil, and miscellaneous smaller containers with capacities up to 5 gallons.

A 300-gallon AST for used cooking oil (e.g. used vegetable shortening from cafeteria fryers) is located in the rear of White Hall on a bermed concrete pad. The pad is equipped with dyked drain hole which allows fro the drainage or rain water but the retention of spilled oil.

2.A.3 Operations

Physical Plant personnel are on duty when the boilers are in operation. The personnel inspect and monitor equipment operations, which allows releases to be rapidly detected.

Fuel oils are delivered to the locations described above by contractors retained by the State of Connecticut when requested by the University. Fuel oil is dispensed automatically from the USTs to the four boilers and hot water heater. Western Connecticut State University physical plant personnel monitor and inspect the heating units and perform minor and routine maintenance work, as necessary. Firing chambers are inspected and maintained periodically by an outside contractor, on a contractual basis.

The drivers of the fuel trucks are responsible for filling the tanks and have been instructed to notify Western Connecticut State University in the event of an emergency. Included in Appendix G are the contractor emergency procedures in the event a release of oil to the environment occurs.

At the Fuel Storage Shed, the diesel fuel dispenser is manually operated (i.e., the handle on the nozzle must be held to dispense product) and always under the supervision of campus maintenance personnel while dispensing fuel. Only authorized personnel are allowed to dispense fuel at this facility. Fuel containers (with a capacity of 5 gallons or less) are “safety can” design with spring-loaded caps that close automatically when not in use. Lubricating and used oils are transferred to small containers when used, to allow easier handling and minimize spills.

When the oil in fryers is changed, used cooking oil is transferred to the AST prior to offsite disposal. Used cooking oil is removed by a contractor (e.g., rendering company), which is responsible for these transfers. The cafeterias typically transfer less than 10 gallons of used cooking oil at a time. The container of used cooking oil may be temporarily stored in a spill containment pan at the building loading dock prior to transfer to the AST.

2.A.4 Site Security

Access to the USTs is closed and may only be opened by authorized personnel. The fill port is also closed and access restricted to authorized personnel. The UST fill port is located decorative brick planter filled with soil, which acts as a vehicle barrier and prevents accidental damage. The boilers and above ground piping (i.e., piping in the troughs) are located within the Boiler House, and personnel are on duty during boiler operations. When personnel are not onsite (e.g., during maintenance shut-downs), the building is closed and locked.

The diesel fuel dispenser station and fuel containers are located inside the Fuel Storage Shed. The shed is kept closed and locked when not in use.

The used cooking oil AST has a lid that is normally kept closed. Additionally, there are bars across the opening to the tank (for adding used cooking oil), which prevents access to the contents. This AST is located with other recycling and trash containers that provide a barrier to prevent vehicle impacts.

Lighting at the campus is adequate to observe leaks and deter vandalism. In addition, Western Connecticut State University officers patrol the campus 24 hours per day, 365 days per year. Security for the fuel storage areas appears adequate to prevent unauthorized access.

2.A.5 Potential Discharge Pathways

It is anticipated that releases on the ground surface from the above-mentioned sources would discharge to area catch basins or to topographic low points. Catch basins drain into the Danbury stormwater system; their locations are noted on Figure 2 for the Midtown Campus of Western Connecticut State University. Additional containment measures implemented at the Midtown Campus of Western Connecticut State University are described in Section 2.A.6 below.

2.A.6 Spill Containment and Control Measures

Western Connecticut State University has taken measures to ensure adequate spill containment and control in areas where oil is stored. The USTs and AST are steel, which is compatible with the stored products. Other storage containers are steel or plastic that are compatible with the stored products. In addition, these tanks are managed in accordance with local, state, and federal regulations.

The USTs and underground piping associated with the Boiler House operations have double-walled steel construction with cathodic protection. The fill port is equipped with drip bucket (with approximately 1-gallon capacity) to minimize a spill or release to the environment during

filling operations. The USTs are equipped with overfill alarms that activate an audible warnings signal at the fill port when triggered. Additionally, the fill port is located and equipped with adequate vehicle protection to prevent accidental damage by vehicle impacts.

Inside the Boiler House. boilers are set in shallow troughs (approximately 1-inch deep, 8 feet wide, and 20 feet long) cast into the concrete floor, which will provide approximately 100 gallons of containment for drips and small leaks. Also, piping from the pumps to the boilers and hot water heater is located in concrete troughs cast into the Boiler House floor. These troughs separate floor drains located in the Boiler House (required for drainage of leaks from water and steam lines) from the piping and boilers. Troughs in the Boiler House are approximately 4 feet wide, 2 feet deep, and a total of 100 feet long, which provides approximately 6,000 gallons of containment capacity in the event of an oil leak or pipe rupture. Containment calculations are included in Appendix I.

The portable flammable materials shed has integral containment with a capacity of approximately 600 gallons. The containment capacity is adequate for the largest storage container (the 275-gallon diesel fuel AST) stored in the shed. The AST is also equipped with a direct sight level gauge and vent whistle to prevent overfills.

The dispenser for diesel fuel is located at the diesel AST, inside the shed. The dispenser nozzle has to be held open to dispense fuel and will automatically shut off when released. Requiring the nozzle to be held also prevents over filling the equipment being fueled. The dispenser pump is located within the shed containment.

While the contractor is filling tanks, University personnel typically monitor the filling operation. The contractor is required to remain at the location until filling is complete. The fill port is equipped with drip bucket (with approximately 1-gallon capacity) to minimize a spill or release to the environment during filling operations. It is recommended that a spill containment kit should be available on delivery trucks.

Adequate containment for the used cooking oil AST is provided by its location. The closest stormwater catch basin is over 200 feet from the AST and the parking area has a rough surface and very slight grade. Since used cooking oils are typically solid or semi-solid at normal temperatures, spills are not expected reach the catch basin. The contractor is required to remain at the location during transfers to remove used cooking oil.

2.A.7 Potential Spill Scenarios

There is a potential that a spill event could occur as a result of a failure of one or more of the following: systems, equipment, components, or personnel actions. Potential spill sources are summarized in Table 2.A.1.

TABLE 2.A.1 POTENTIAL SPILL SCENARIOS			
Source	**Type of Failure**	**Maximum Spill**	**Rate of Flow**
Boiler USTs	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Combined UST capacity (50,000 gallons)	Limited by soil porosity
	Leakage	Combined UST capacity (50,000 gallons)	Varies, limited by soil porosity
Diesel Fuel AST	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Tank capacity (275 gallons)	Instantaneous
	Leakage	Tank capacity (275 gallons)	Varies
Used Cooking Oil AST	Over-fill	Dependent upon conditions during fill	Varies, typically up to 10 gallons
	Rupture	Tank capacity (300 gallons)	Instantaneous, however oil is solid or semi-solid.
	Leakage	Tank capacity (300 gallons)	Varies, expected to be slow.
Truck Transfer	Rupture	Truck capacity (varies)	Instantaneous
	Leakage	Dependent on source of leakage	Varies

2.A.8 History of Spills

There have been no records of reportable oil releases at the Midtown Campus primary oil storage areas at Western Connecticut State University.

2.B WESTSIDE CAMPUS BUILDINGS

2.B.1 Site Location

The six buildings located at the Westside Campus include the academic, athletic, dormitory, and maintenance buildings. Classrooms and faculty offices are located in the Westside Classroom Building, with limited facilities located in the University Observatory. An indoor sports arena,

ice rink, pool, and other athletic facilities are located in the William A. O'Neill Athletic and Convocation Center. Dormitory buildings include A. Searle Pinney and Ella Grasso Halls. The Westside Campus maintenance facility is located in the maintenance building, which is discussed separately in the next section. The Charles Ives Center for the Arts is not owned or operated by Western Connecticut State University, and is not covered by this SPCC Plan.

Westside Campus buildings are individually heated by oil-fired boilers, with each building having a separate system, except the University Observatory which has electric heating and not discussed further in this Plan. These heating systems use No. 2 fuel oil. Oil storage for the heating units is provided by ASTs or USTs located at each building. Other oil storage and/or oil-bearing equipment in Westside Campus buildings are discussed in the function-specific sections of this Plan (i.e., Sections 2D through 2H).

2.B.2 Site Description

Heating oil storage at the Westside Classroom Building is provided by a 12,000-gallon UST that supplies a 20-gallon day tank in the boiler room. The UST is located due west from the northwest corner of the building. The UST has double-wall fiberglass construction and the piping has double-wall steel construction with cathodic protection. The UST is equipped with an electronic continuous monitoring system to detect releases. The day tank is a steel single-wall tank with electronic controls (pressure switch and float switch) to regulate fuel flow from the UST and to the fuel pumps. In the boiler room, fuel pipelines from the day tank to the boilers are located in concrete troughs cast in the boiler room floor.

Heating oil storage for the O'Neill Athletic building is provided by a 10,000-gallon UST that supplies a 30-gallon day tank in the boiler room. The UST is located due north from the northeast corner of the building. The UST has double-wall fiberglass construction and the piping has double-wall steel construction. The UST is equipped with an electronic continuous monitoring system to detect releases. In the boiler room, fuel pumps are located inside a concrete containment area, and fuel pipelines are located above the floor. The fuel piping is located as far from floor drains (required for drainage of leaks from water and steam lines) as practicable.

At Pinney Hall, heating oil is stored in a 12,000-gallon AST that directly feeds the boilers. The AST is mounted on a concrete pad located west of the northwest side of the building. The AST is constructed of steel and enclosed in a steel containment box. Fuel flows from the AST to the boilers through underground piping, which has double-wall steel construction. The AST and containment are equipped with an electronic continuous monitoring system to detect releases.

At Ella Grasso Hall, heating oil is stored in a 10,000-gallon AST that directly feeds the boilers. The AST is mounted on a concrete pad located west of the southern leg of the building. The AST is enclosed with a wooden fence, and is constructed of steel and equipped with integral containment (i.e., double-wall construction). Fuel flows from the AST to the boilers through underground piping, which has double-wall steel construction. The AST is equipped with a vent whistle and direct sight level gauge to prevent overfills. .

2.B.3 Operations

Fuels are delivered to the various locations by contractors retained by the State of Connecticut on a routine delivery cycle schedule or when requested by the University. Fuel is automatically dispensed from the tanks to the heating units in each building. Western Connecticut State University personnel monitor and inspect the heating units, and perform minor and routine maintenance work, as necessary. Systems are inspected and maintained periodically by an outside contractor, on a contractual basis.

The containment for the Pinney Hall AST is not sealed and may collect precipitation. Collected runoff and potential releases are restrained by a manually operated valve at the containment drain. Typically, collected precipitation in the AST containment is drained or allowed to dissipate by evaporation. Visual inspections for the presence of hydrocarbons in collected runoff are performed as part of the pre-drainage inspections. In the event that petroleum impacts are observed (e.g., sheen or sludge is present), the petroleum products may be removed with absorbent materials. If significant impacted runoff is observed inside the containment, it may be collected by a licensed contractor for offsite disposal. The University Coordinator of Health, Safety, and Environmental Affairs, or a designated qualified person, is responsible for draining the containment structure. Date, start and finish times will be recorded on the stormwater drainage form (included in Appendix H) for each discharge, and drainage records will be kept in the SPCC compliance file in the Office of Health, Safety, and Environmental Affairs. The integral containment for the AST at Grasso Hall is sealed to prevent precipitation entering the containment space.

The drivers of the fuel trucks are responsible for filling the tanks, and have been instructed to notify Western Connecticut State University in the event of an emergency. Included in Appendix G are the contractor emergency procedures in the event a release of oil to the environment occurs.

2.B.4 Site Security

Access to the USTs is closed and may only be opened by authorized personnel. The fill ports are also closed and access restricted to authorized personnel. The UST fill ports are located off the roads, in grassed areas and below ground level, to prevent accidental damage from vehicle impacts.

Access to the ASTs is limited to authorized personnel. The AST fill ports are located at the top of the tanks and the tanks are located to prevent accidental damage from vehicle impacts. The fill ports are kept closed and access restricted to authorized personnel. It is recommended that security fence (e.g., chain-link fence topped with barbed wire) be installed around the AST at Pinney Hall, and that the gate to this fence be closed and locked when authorized personnel are not present. Additionally, the gate of the fence around the AST at Grasso Hall should be closed and locked when authorized personnel are not present.

Lighting at the campus is adequate to observe leaks and deter vandalism. In addition, Western Connecticut State University officers patrol the campus 24 hours per day, 365 days per year. Security for the fuel storage areas appears adequate to prevent unauthorized access.

2.B.5 Potential Discharge Pathways

It is anticipated that releases on the ground surface from the above-mentioned sources would discharge to area catch basins or to topographic low points. Most catch basins drain into the Danbury stormwater system. Catch basins in the parking area west of Pinney Hall (in the area around the Pinney Hall AST) direct the collected runoff to a retention pond located west of the parking lot. Catch basins on the road east of the O'Neill Athletic Center and around the new stadium direct collected runoff to a retention pond located east of the new stadium, although spills are unlikely to enter these catch basins. Locations of catch basins and retention ponds are shown on Figure 3 for the Westside Campus of Western Connecticut State University. Secondary containment measures implemented at the Westside Campus of Western Connecticut State University are described in 2.B.6 below.

2.B.6 Spill Containment and Control Measures

Western Connecticut State University has taken measures to ensure adequate spill containment and control in areas where oil is stored. The USTs and AST are fiberglass or steel, which is compatible with the stored products. In addition, these tanks are managed in accordance with local, state, and federal regulations.

The USTs and underground piping associated with the Westside Classroom Building and O'Neill Athletic Center have double-walled fiberglass construction and double-walled piping with cathodic protection. The fill ports are equipped with drip buckets (with approximately 1-gallon capacity) to minimize a spill or release to the environment during filling operations. The USTs are equipped with continuous electronic monitoring systems to detect leaks. In addition, the fill ports are located in grassed areas, off the roadways, to prevent accidental damage by vehicle impacts.

Inside the Westside Classroom Building boiler room, piping from the pumps to the boilers is located in concrete troughs cast into the floor. These troughs separate floor drains located in the boiler room (required for drainage of leaks from water and steam lines) from the piping and boilers. Troughs in the boiler room are approximately 1 ½ feet wide, 1 foot deep, and 30 feet long, which provides approximately 340 gallons of containment capacity in the event of an oil leak or pipe rupture. Containment calculations are included in Appendix I.

Inside the O'Neill Athletic Center boiler room, piping from the UST and the fuel pumps are located within containment. Containment is provided by a concrete berm approximately 4 feet wide, 5 feet long, and 8 inches deep, which provides approximately 100 gallons of containment capacity in the event of an oil leak or pipe rupture. Containment calculations are included in Appendix I. The piping from the fuel pumps and boilers are located a far as practicable from the floor drains located in the boiler room that required for drainage of leaks from water and steam lines.

The AST at Pinney Hall is enclosed in a steel containment box that provides secondary containment. The steel box for secondary containment approximately 9 feet wide, 45 feet long, and 4 ½ feet deep, which provides approximately 13,600 gallons of containment capacity. The secondary containment capacity is approximately 114 percent of the AST volume, and provides adequate containment with freeboard for precipitation. Containment calculations are included in Appendix I. In addition, underground fuel lines from the AST to the boilers are double-wall steel construction. The AST and containment are equipped with an electronic continuous monitoring system to detect releases.

The AST at Ella Grasso Hall is a double-walled steel tank that provides integral secondary containment. Since the tank is double-walled, the secondary containment is adequate to contain the contents of the entire tank. No freeboard for precipitation is required because the outer wall is sealed to prevent precipitation from entering the interstitial space. The AST is equipped with a vent whistle and direct sight level gauge to prevent overfills. In addition, underground fuel lines from the AST to the boilers are double-wall steel construction.

While the contractor is filling the tanks, care is provided so that there is continuous surveillance of the filling operation. The contractor is required to remain at the location until filling is complete. Drip pans are also incorporated, where appropriate, to minimize the possibility of any spill or release to the environment during filling operations. It is recommended that a spill containment kit should be available on delivery trucks.

2.B.7 Potential Spill Scenarios

There is a potential that a spill event could occur as a result of a failure of one or more of the following: systems, equipment, components, or personnel actions. Potential spill sources are summarized in Table 2.B.1.

TABLE 2.B.1 POTENTIAL SPILL SCENARIOS			
Source	**Type of Failure**	**Maximum Spill**	**Rate of Flow**
Fuel AST	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Tank capacity (up to 12,000 gallons)	Instantaneous
	Leakage	Tank capacity (up to 12,000 gallons)	Varies
Fuel UST	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Tank capacity (up to 12,000 gallons)	Limited by soil porosity
	Leakage	Tank capacity (up to 12,000 gallons)	Varies, but limited by soil porosity
Truck Transfer	Rupture	Truck capacity (varies)	Instantaneous
	Leakage	Dependent on source of leakage	Varies

2.B.8 History of Spills

There have been no records of reportable oil releases at the Westside Campus of Western Connecticut State University.

2.C WESTSIDE CAMPUS MAINTENANCE SHOP

2.C.1 Site Location

The Westside Campus Maintenance Shop is located at the northwestern side of this campus. This shop supports the Western Connecticut State University infrastructure and crafts requirements for the campus, and provides vehicle servicing and maintenance for both of the Danbury campuses.

2.C.2 Site Description

The Westside Campus Maintenance Shop stores and uses fuel, oil, and grease. Outside the shop building are a 500-gallon AST with dispenser for gasoline, a 275-gallon AST with dispenser for

diesel fuel, and a 280-gallon AST for used oil. In the maintenance bays of the shop are two (2) 55-gallon drums of oil, as well as miscellaneous oil products including a 30-gallon drum of grease, a parts washer with approximately a 30-gallon capacity, and other containers (1 quart to 5 gallons). In addition, the maintenance shop has a hydraulic lift (with an estimated 20 gallons of hydraulic fluid).

Asphalt-paved parking and maneuvering areas are located adjacent to the southern, western and northern sides of the shop building. The paved areas are curbed and graded to direct precipitation runoff to catch basins located at the northwestern and southwestern corners.

Floor drains in the shop bays have been sealed. The shop floors are graded to direct potential spills to these low points, where it can be collected with absorbent material or by other means (e.g., vacuum truck).

The gasoline AST is in a Convault concrete containment box, which is sealed to keep out precipitation. This AST is mounted on a concrete pad at the northeastern corner of the shop parking lot. The used oil and diesel fuel ASTs are in steel containment boxes. The used oil containment is sealed to prevent collecting precipitation. However, the diesel fuel containment may collect precipitation and is equipped with a drain plug to allow the water to be removed. These ASTs are set on the asphalt pavement outside the northwestern side of the shop building.

2.C.3 Operations

This shop provides vehicle servicing and maintenance for both of the Danbury campuses, and supports infrastructure and crafts requirements for the Westside Campus. Fueling of Campus vehicles and equipment is also performed at the Maintenance Shop.

Fuels are delivered to the ASTs by contractors retained by the State of Connecticut on a routine delivery cycle schedule or when requested by the University. Used oil is removed from the used oil AST by a licensed contractor retained by the State of Connecticut, when requested by University personnel.

The containment for the diesel fuel AST is not sealed and may collect precipitation. Collected runoff and potential releases are restrained by a screw-in drain plug at the containment drain. Typically, collected precipitation in the AST containment is drained or allowed to dissipate by evaporation. Visual inspections for the presence of hydrocarbons in collected runoff are performed as part of the pre-drainage inspections. In the event that petroleum impacts are observed (e.g., sheen or sludge is present), the petroleum products may be removed with absorbent materials. If significant impacted runoff is observed inside the containment, it may be collected by a licensed contractor for offsite disposal. The Coordinator of Health, Safety, and Environmental Affairs, or a designated qualified person, is responsible for draining the containment structure. Date, start and finish times will be recorded on the stormwater drainage form (included in Appendix H) for each discharge, and drainage records will be kept in the SPCC compliance file at the Office of Health, Safety, and Environmental Affairs.

Gasoline and diesel fuel dispensers are manually operated (i.e., the handle on the nozzle must be held to dispense product) and always under the supervision of campus personnel while dispensing fuel. Only authorized personnel are allowed to dispense fuel at this facility.

The drivers of the fuel trucks are responsible for fuel deliveries and collecting used oil. The contractors have been instructed to notify Western Connecticut State University in the event of an emergency. Included in Appendix G are the contractor emergency procedures in the event a release of oil to the environment occurs.

2.C.4 Site Security

Doors to the shop and garage are closed and locked when Shop personnel are not on duty. In addition, Western Connecticut State University Police officers patrol the campus, including the Maintenance Shop, 24 hours per day, 365 days per year. Additionally a security system is installed at the Maintenance facility that reports to a central receiving station at the University Police Department.

Access to the ASTs and fuel dispensers is restricted to authorized personnel. The AST fill ports are located at the top of the tanks and the tanks are located to prevent accidental damage from vehicle impacts. ASTs are located in well-traveled areas, so leaks can be readily observed. It is recommended that security fence (e.g., chain-link fence topped with barbed wire) be installed to enclose the Maintenance Shop and the ASTs, and that the gate to this fence be closed and locked when authorized personnel are not present.

Lighting in the area provides adequate illumination to deter vandalism and observe potential leaks of the stored oil.

2.C.5 Potential Discharge Pathways

It is anticipated that releases from the above-mentioned sources would discharge to area catch basins, which are connected to the campus stormwater system. Catch basin locations are shown on Figures 3 for the Western Connecticut State University Westside Campus area. The stormwater system discharges to natural drainage ways north of the Maintenance Shop. Containment measures enacted at Maintenance Shop are described in 2.C.6 below.

2.C.6 Spill Containment and Control Measures

Western Connecticut State University has taken measures to ensure adequate spill containment and control in areas where oil is stored. The AST are constructed of steel with welded seams, which is compatible with the stored products. In addition, these tanks are managed in accordance with local, state, and federal regulations.

The ASTs have integral secondary containment (i.e., concrete Convault or steel boxes) that completely contain these tanks. Since the tanks are completely contained, the secondary containment for each tank is adequate to contain the contents of the entire tank. No freeboard for precipitation is required for the gasoline and used oil ASTs because the containment boxes are

sealed to prevent precipitation from entering the interstitial space. The diesel fuel AST containment is covered to prevent precipitation entering, and observed daily (and drained as needed) to ensure adequate containment capacity. The gasoline and diesel fuel ASTs are equipped with a vent whistle and direct sight level gauge to prevent overfills. Oil levels in the used oil AST are observed or manually gauged before transfers to prevent overfilling. Since used oil is transferred to this AST from small containers (e.g., drain pans or buckets) this system appears adequate.

Dispensers for gasoline diesel fuel are located at the gasoline and diesel fuel ASTs, respectively. The dispenser nozzles have to be held open to dispense fuel and will automatically shut off when released. Requiring the nozzle to be held also prevents over filling the equipment being fueled.

While the contractor is filling the diesel or gasoline tanks or removing used oil, care is provided so that there is continuous surveillance of the operation. The contractor is required to remain at the location until operation is complete. Drip pans are also incorporated to minimize the possibility of any spill or release to the environment during these operations. It is recommended that a spill containment kit should be available on delivery trucks.

2.C.7 Potential Spill Scenarios

There is a potential that a spill event could occur as a result of a failure of one or more of the following: systems, equipment, components, or personnel actions. Potential spill sources are summarized in Table 2.D.1.

TABLE 2.D.1 POTENTIAL SPILL SCENARIOS			
Source	**Type of Failure**	**Maximum Spill**	**Rate of Flow**
Waste oil & fuel AST	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Compartment capacity (330 gallons)	Instantaneous
	Leakage	Compartment capacity (330 gallons)	Varies
Fuel UST	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Compartment capacity (1,000 gallons)	Limited by soil porosity
	Leakage	Compartment capacity (1,000 gallons)	Varies
Truck Transfer	Rupture	Truck capacity (varies)	Instantaneous
	Leakage	Dependent on source of leakage	Varies

2.C.8 History of Spills

There have been no records of reportable oil releases at the Physical Plant Maintenance Shop on the Western Connecticut State University campus.

2.D EMERGENCY GENERATORS AND FIRE PUMPS

2.D.1 Site Location

Western Connecticut State University diesel-powered emergency generators and fire pumps are located in the following campus areas:

- Haas Library (fire pump);
- Ella Grasso Hall (fire pump);

- William A. O'Neill Athletic and Convocation Center (emergency generator);
- Westside Classrooms Building (emergency generator); and
- A. Searle Pinney Hall (emergency generator)..

Emergency generators at the Midtown Campus (at Old Main, Higgins and Higgins Annex Halls and the Boiler House) are fueled by natural gas or propane, and not addressed by this Plan.

2.D.2 Site Description

The fire pumps at Haas Library and Grasso Hall are diesel-powered systems. The fire pump and a single, separate AST (250-gallon capacity at Haas Library and 275-gallon capacity at Grasso Hall) that provides fuel to the fire pump are located within the building at each location. The generator at the O'Neill Athletic Center is located in an equipment room adjacent to the boiler room. This generator runs on No. 2 fuel oil provided by the O'Neill Athletic Center UST (described in Section 2.B) and has a 30-gallon day tank. The Westside Classroom Building has emergency generator located within the building, which is fueled by a 3,000-gallon UST that supplies a 25-gallon day tank. The Pinney Hall emergency generator is located on a concrete pad at the western side of the building, adjacent to the heating oil AST. This generator has an integral double-walled 500-gallon fuel tank.

2.D.3 Operations

The emergency generators are used to provide electrical power should normal electrical distribution be disrupted. Fuel is delivered to the fuel tanks for the generators and fire pumps by a contractor retained by the State of Connecticut, when requested by the University. Drivers of the fuel trucks are responsible for filling the tank, and have been instructed to notify Western Connecticut State University in the event of an emergency.

Routine maintenance is performed by Physical Plant personnel. This maintenance may include periodic starting and testing, oil changes, and lubrication. Additional service for the equipment is provided by contractors retained by the University.

2.D.4 Site Security

The generators and fire pumps are located in mechanical rooms in the buildings, except for the Pinney Hall generator. Doors to these rooms are kept closed and locked when Physical Plant personnel are not present. The Pinney Hall generator and fuel tank are in a common protective structure that is kept closed and locked when Physical Plant personnel are not present. The fuel tanks for the fire pumps and day tanks for emergency generators are located in the same room as the associated unit.

Access to the USTs is closed and may only be opened by authorized personnel. The fill ports are also closed and access restricted to authorized personnel. The UST fill ports are located off the roads, in grassed areas and below ground level, to prevent accidental damage from vehicle impacts.

In addition, Western Connecticut State University Police officers patrol the campus 24 hours per day, 365 days per year. Security for the emergency generators appears adequate to prevent unauthorized access. Adequate illumination to deter vandalism and observe potential leaks is provided.

2.D.5 Potential Discharge Pathways

It is anticipated that releases from the above-mentioned sources would discharge to area catch basins or to topographical low points. Catch basins in the parking area west of Pinney Hall (in the area around the Pinney Hall emergency generator) direct the collected runoff to a retention pond located west of the parking lot. Catch basins on the road east of the O'Neill Athletic Center and around the new stadium direct collected runoff to a retention pond located east of the new stadium, although spills are unlikely to enter these catch basins. Other catch basins drain into the Danbury stormwater system; their locations are noted on Figures 2 and 3 for the Midtown and Westside Campuses of Western Connecticut State University, respectively. Further containment measures enacted at Western Connecticut State University are described in 2.E.6 below.

2.D.6 Spill Containment and Control Measures

Western Connecticut State University has taken measures to ensure adequate spill containment and control in areas where oil is stored. The USTs are constructed of fiberglass, and ASTs are constructed of steel with welded seams. The ASTs and USTs are managed in accordance with local, state, and federal regulations.

The USTs and underground piping associated with the Westside Classroom Building and O'Neill Athletic Center emergency generators have double-walled fiberglass construction and double-walled piping with cathodic protection. The fill ports are equipped with drip buckets (with approximately 1-gallon capacity) to minimize a spill or release to the environment during filling operations. The USTs are equipped with continuous electronic monitoring systems to detect leaks. In addition, the fill ports are located in grassed areas, off the roadways, to prevent accidental damage by vehicle impacts. The emergency generator rooms have no floor drains and the building provides containment.

At Haas Library, the 250-gallon AST is in the same room as the fire pump. The tank is equipped with a direct level sight gauge and vent whistle, as well as an overfill alarm connected to the fire alarm system, to prevent overfilling. When triggered, the overfill alarm activates an alarm on the supervisor's panel. A concrete wall around the tank (3 feet by 7 feet and 4 inches high) provides up to 50 gallons of containment capacity for small leaks. Fuel lines are in plastic sleeves to prevent contact with concrete floors, which prevents corrosion. Floor drains required to handle water in the fire system are located are far from the tank as practicable.

At Ella Grasso Hall, the 275-gallon AST is in the same room as the fire pump. The tank is equipped with a direct level sight gauge and vent whistle to prevent overfilling. The AST is also equipped with a low level alarm. Floor drains and protected, and the room provides containment for this AST.

The Pinney Hall emergency generator has an integral double-walled tank. The tank is equipped with a direct level sight gauge to prevent overfilling. The tank is located in the weather-proof structure that also protects the generator and associated piping.

While the contractor is filling the tanks, care is provided so that there is continuous surveillance of the filling operation by the driver. The contractor is required to remain at the location until filling is complete. Drip pans are also incorporated to minimize the possibility of any spill or release to the environment during filling operations. It is recommended that a spill containment kit should be available on delivery trucks.

2.D.7 Potential Spill Scenarios

There is a potential that a spill event could occur as a result of a failure of one or more of the following: systems, equipment, components, or personnel actions. Potential spill sources are summarized in Table 2.E.1.

TABLE 2.E.1 POTENTIAL SPILL SCENARIOS			
Source	**Type of Failure**	**Maximum Spill**	**Rate of Flow**
Fuel Tank	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Compartment capacity (up to 500 gallons)	Instantaneous
	Leakage	Compartment capacity (up to 500 gallons)	Varies
Fuel UST	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Compartment capacity (3,000 gallons)	Limited by soil porosity
	Leakage	Compartment capacity (3,000 gallons)	Varies
Truck Transfer	Rupture	Truck capacity (varies)	Instantaneous
	Leakage	Dependent on source of leakage	Varies

2.D.8 History of Spills

There have been no records of reportable releases at the emergency generators or fire pumps on the Western Connecticut State University campuses.

2.F HYDRAULIC ELEVATORS

2.F.1 Site Location

Hydraulic elevators, which circulate oil in a piston to raise and lower the passenger compartment, are located in the following campus buildings:

- Midtown Parking Garage;
- University Hall;
- Haas Library (two banks of elevators);
- Fairfield Hall;
- White Hall (two banks of elevators);
- Warner Hall;
- Berkshire Hall;
- Higgins Hall;
- Higgins Annex;
- Student Center;
- Newbury Hall (two banks of elevators);
- Litchfield Hall;
- O'Neill Athletic Center;
- Westside Classroom Building;
- Ella Grasso Hall; and
- Pinney Hall.

2.F.2 Site Description

At each hydraulic elevator, the piston is located at the base of the elevator shaft and extends into the ground below the base of the shaft. The hydraulic pump and oil reservoir for each elevator is located in a ground floor room (the control room) adjacent to the shaft. The floor of the control room and the elevator shaft are reinforced concrete; the hydraulic piston is seamless steel pipe.

Approximately 145 to 150 gallons of oil are stored in each elevator reservoir. To raise the elevator's passenger compartment, oil is pumped into the piston. Oil is returned to the reservoir to lower the passenger compartment. The reservoir and pump are connected to the piston by hydraulic hose lines.

2.F.3 Operations

Western Connecticut State University contracts with a local elevator service company for the maintenance and repair of the elevators. The pump, reservoir, and piston of each elevator is a closed system, so regular oil filling is not required. Typical maintenance operations may include changing hydraulic fluid and hydraulic lines.

2.F.4 Site Security

Doors to the control rooms are closed and locked when Physical Plant personnel or subcontracted maintenance personnel are not present. Key-operated controls limit access to the elevator shafts, and keys are only issued to authorized personnel. Security for these sites appears adequate to prevent unauthorized access.

Lighting in the control rooms provides adequate illumination to observe potential oil leaks.

2.F.5 Potential Discharge Pathways

It is anticipated that releases from the above-mentioned sources would discharge to area catch basins or to topographical low points. Catch basins drain into the Danbury stormwater system; their locations are noted on Figures 2 and 3 for the Midtown and Westside Campuses of Western Connecticut State University, respectively. Access to all floor drains has been eliminated in areas where oil is used or stored; therefore, discharge via indoor floor drains is not anticipated. Further containment measures enacted at Western Connecticut State University are described in 2.G.6 below.

2.F.6 Spill Containment and Control Measures

Western Connecticut State University has taken measures to ensure adequate spill containment and control in areas where oil is stored. Control rooms, elevator shafts, and/or adjacent rooms or corridors provide adequate containment for potential spills.

2.F.7 Potential Spill Scenarios

There is a potential that a spill event could occur as a result of a failure of one or more of the following: systems, equipment, components, or personnel actions. Potential spill sources are summarized below.

TABLE 2.G.1
POTENTIAL SPILL SCENARIOS

Source	Type of Failure	Maximum Spill	Rate of Flow
Hydraulic Pump and Reservoir	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Reservoir capacity (up to 150 gallons)	Instantaneous
	Leakage	Reservoir capacity (up to 150 gallons)	Varies

2.F.8 History of Spills

There have been no records of reportable oil releases at the hydraulic elevators on the Western Connecticut State University campus.

2.G ELECTRICAL TRANSFORMERS

2.G.1 Site Location

Transformers with mineral oil dielectric fluid (MODF) are located at the Western Connecticut State University campuses, and included in this SPCC Plan for completeness. However, the transformers are owned and operated by Connecticut Power and Light, and Western Connecticut State University cannot institute containment measures. Transformers on the Midtown and Westside Campuses were replaced in 1999 and appear to be in good condition. Transformers (typically located in grassy areas) are at or near the following campus buildings:

- Midtown Parking Garage;
- Between Haas Library and Warner Hall;
- Fairfield Hall;
- Berkshire Hall;
- Between Higgins Hall and Higgins Annex;
- Student Center (two transformers);
- Midtown Campus Entrance (east of Old Main);
- Colonial Field;
- O'Neill Athletic Center;
- Westside Classroom Building (inside);
- Ella Grasso Hall;
- Pinney Hall; and
- University Observatory.

The transformers are of various sizes and have various oil capacities.

2.G.2 Site Description

Generally, transformers located in grassy areas outside buildings. Transformers are in locked weather-proof structures. The exception is the transformer in the Westside Classroom Building, which is locked in the electrical equipment room. The equipment room also has a concrete floor.

Since Western Connecticut State University does not own or operate these transformers, no oil storage inventory for the electrical transformers is included.

2.G.3 Operations

Transformers are sealed units that contain MODF for cooling and insulating purposes. Any required maintenance or service is provided by the transformers' owner/operator.

2.G.4 Site Security

Weatherproof cabinets provide security for the outdoor transformers. Access doors of the cabinets are kept closed and locked, except when the transformers are being serviced. At the Westside Classroom Building, doors to the electrical rooms are kept closed and locked when Physical Plant personnel or service personnel are not present.

In addition, Western Connecticut State University Police officers patrol the campus 24 hours per day, 365 days per year. Security for the transformer sites appears adequate to prevent unauthorized access. Lighting at these campuses appears adequate to deter vandalism and detect leaks.

2.G.5 Potential Discharge Pathways

It is anticipated that releases from the above-mentioned sources would discharge to area catch basins or to topographical low points. Catch basins drain into the Danbury stormwater system; their locations are noted on Figures 2 and 3 for the Midtown and Westside Campuses of Western Connecticut State University, respectively.

2.G.6 Spill Containment and Control Measures

Transformers are owned and operated by Connecticut Power and Light, and Western Connecticut State University cannot institute containment measures. However, Western Connecticut State University personnel will notify the transformers' owner/operator if leaks, drips, or other damage to the units or their cabinets is observed.

2.G.7 Potential Spill Scenarios

There is a potential that a spill event could occur as a result of a failure of one or more of the following: systems, equipment, components, or personnel actions. Potential spill sources are summarized below.

TABLE 2.G.1
POTENTIAL SPILL SCENARIOS

Source	Type of Failure	Maximum Spill	Rate of Flow
Transformer	Over-fill	Dependent upon conditions during fill	Varies
	Rupture	Transformer capacity	Instantaneous
	Leakage	Transformer capacity	Varies

2.G.8 History of Spills

There have been no records of reportable oil releases at transformers on the Western Connecticut State University campus.

3.0 TRAINING AND STANDARD OPERATING PROCEDURES

3.1 TRAINING

Training is provided to the Western Connecticut State University Physical Plant, Public Safety, staff, and faculty personnel involved with operations and maintenance of oil storage and/or oil-bearing equipment. This training is conducted while on-the-job under the direct supervision of the Coordinator of Health, Safety, and Environmental Affairs or other designated, experienced personnel. Training for newly hired personnel includes:

- Instruction in proper oil transfer operations (e.g., filling tanks, dispensing fuel);
- Familiarization with the location of fire fighting equipment and their operation;
- Instruction in the proper gauging techniques for tanks;
- Instruction in conducting campus inspections;
- Familiarization with campus operations, including operation and maintenance of equipment to detect or prevent discharges of oil;
- Training in general maintenance schedules and procedures;
- Training in applicable pollution control laws, rules and regulations; and
- Review of the SPCC Plan.

Employees also receive annual oil spill prevention and response training as applicable to their job responsibilities, which includes techniques to prevent or recognize existing or potential oil spills and the appropriate notification required in the event of an oil spill. In addition, annual training will review material covered in the new-hire training and highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures.

Through training, Western Connecticut State University personnel are made aware that 1) care and good judgment are the best means of preventing a fuel spill, 2) inspections can identify leaks, and 3) leaks must be controlled and repaired as soon as practicable. Facility personnel are instructed to:

- Exercise care in the delivery of products.
- Never leave oil transfers unattended.
- Monitor the product levels in storage tanks and report tank levels, as required.
- As a general rule, do not wait for problems to occur. Anticipate problems and take precautionary measures to prevent them.

In addition to the initial and annual training, Western Connecticut State University will hold meetings periodically to brief personnel on current and pending regulations. Also, as new operations require procedure modifications, employees will be familiarized with the new procedures prior to implementation. This training will be conducted by the Coordinator of Health, Safety, and Environmental Affairs or other designated, experienced personnel who will be responsible for ensuring that each employee understands the new operations procedures.

Training requirements are based on the duties and function to be performed by each employee, and will be provided by qualified instructors in accordance with state and federal training requirements. The *designated accountable person* for oil pollution control will ensure that the appropriate personnel complete the training requirements. The *designated accountable person* responsible for oil spill prevention and implementing the SPCC Plan at Western Connecticut State University is the Coordinator of Health, Safety, and Environmental Affairs.

3.2 CONTENT OF SPCC-RELATED TRAINING

Initial and subsequent annual training relative to the content of the SPCC Plan will be provided to affected employees. In addition, any major changes in requirements or procedures involving oil will immediately be brought to the attention of the affected personnel prior to implementing the changes.

All personnel that are involved in oil storage, handling, and spill response will be provided with the training. Topics discussed in the training session will include the following:

- Pertinent topics from the Occupational Safety and Health Administration (OSHA) Employee Emergency Action Plan training requirements (29 CFR 1910.38), including:
  1. Emergency escape procedures and route assignments;
  2. Procedures to account for all employees;
  3. Rescue and medical duties for those who are to perform them;
  4. The preferred means of reporting fires and other emergencies; and
  5. The names of individuals to contact for more information or explanations of duties under the Plan.

- Pertinent topics from the OSHA Hazard Communication Standard (29 CFR 1910.120) training, including:
  1. Characteristics and detection methods for oils used at the facility;
  2. Physical and health hazards of oils used; and
  3. Explanation of the labeling system and material safety data sheets (MSDSs).

- Laws and regulations requiring the SPCC Plan;
- Spill detection methods;
- Alarm and communication system operation;
- Incident response procedures and cleanup activities;
- Amendments to the SPCC Plan;
- Delivery and dispensing procedures;
- Inspection and record keeping procedures;
- Operation and maintenance of equipment to prevent the accidental discharge of oil;
- Applicable pollution control regulations; and
- New regulations concerning oil spill prevention.

3.3 SPCC Responses to Incidental Releases

Based on the level of preparedness Western Connecticut State University will incorporate into its spill response program, some employees will be required to respond to a spill of oil as follows:

- Employees may stop a leak at the source only if the spill would be considered an "incidental release" under 29 CFR 1910.120 and only if the spill is located in the employees' work area.
- Employees may contain a spill that is incidental in the employees' work area.
- Employees will call for help.
- Employees may cleanup the spilled oil if the spill could be considered an "incidental release" and only if the spill is located in an employee's work area.

Employees who will participate in *incidental release response* and all other employees regularly working with or around oils who are likely to witness or discover an oil spill will be given awareness training. Generally, this training is approximately two hours or less, based on the complexities of each area. To satisfy the awareness training requirement, employees must have sufficient specific training or have had sufficient experience to objectively demonstrate competency in the following areas:

- An understanding of what oil is, and the risks associated with an incident.
- An understanding of the potential outcomes associated with an emergency created when oil is present.
- The ability to recognize the presence of oil in an emergency.
- The ability to identify the type of oil.
- The ability to realize the need for additional resources, and to make appropriate notifications.
- Hands-on experience with the U.S. Department of Transportation's (DOT's) Emergency Response Handbook.
- Familiarity with OSHA Standard 1910.120.
- Knowledge of how to respond to an oil release.
- Understanding of expected hazards such as fire, explosion, confined space, powered equipment, walking-working, etc.
- Awareness of the competencies covered in the National Fire Protection Association's Standard No. 472, "Professional Competence of Responders to Hazardous Materials Incidents."

3.4 SPCC EMERGENCY RESPONSE TO HAZARDOUS MATERIALS RELEASE

Currently, Western Connecticut State University does not have a formal spill response team; the University instead relies on the local fire department and spill response contractors for assistance, should a significant spill occurs on campus. It is Western Connecticut State University's intent to have five to seven key individuals trained to the 24-hour Hazardous Materials Technician level for preparedness to spill event. Employees who will participate in emergency response to a *hazardous material release* will be given at least 24 hours of Hazardous

Materials Technician training. To satisfy the 24-hour training requirement, employees must have sufficient specific training or have had sufficient experience to objectively demonstrate competency in the following areas:

- Know how to implement the Western Connecticut State University Emergency Response Plan.
- Know the classification, identification, and verification of known and unknown materials by using field survey instruments and equipment.
- Be able to function within an assigned role in the Incident Command System.
- Know how to select and use proper specialized chemical equipment provided to the Hazardous Material Technician.
- Understand hazard and risk assessment techniques.
- Be able to perform advance control, containment, and/or confinement operations within the capabilities, resources, and personal protective equipment available to the unit.
- Understand and implement decontamination procedures.
- Understand termination procedures.
- Understand basic chemical and toxicological terminology and behavior.

Training records for Western Connecticut State University personnel are kept in the personnel training files at the office of the Coordinator of Health, Safety, and Environmental Affairs.

3.5 STANDARD OPERATING PROCEDURES

Physical Plant supervisors and maintenance personnel shall be instructed in the standard operating procedures for spill prevention listed below:

1. During maintenance operations involving the transfer of oil, qualified personnel are present to continuously monitor the operation.
2. When conducting any maintenance activities involving the transfer of oil, absorbent pads are readily available and drip pans are in place. Oil drips are promptly cleaned up with absorbent materials.
3. Oil-contaminated material from the cleanup of a spill is collected into drums or large plastic bags provided in spill kits. Oil-contaminated debris is stored in a secure area until it is picked up for disposal.
4. In the event of a release, see Figure 4, Spill Response Procedures Flowchart, for a quick reference or Spill Notification List and Response Procedures found in Appendix A of this Plan for detailed procedures.
5. Inspect oil-bearing equipment for leaks, corrosion, cracks, bad seals, discoloration, or other signs of distress before using.
6. Whenever equipment is undergoing major maintenance, verify that any alarm systems in place related to oil levels in larger pieces of equipment are functioning properly.
7. Monthly visual inspections of the fuel storage and garage fuel dispensing areas and emergency generators shall be conducted by the Coordinator of Health, Safety, and Environmental Affairs, or designated qualified personnel. Inspections include

observation of the equipment, containment measures, tank alarms, spill kits, and whether obvious leaks and/or damage are apparent or not. Monthly inspections are recorded on the inspection checklist form in Appendix D. Deficiencies are noted and corrected as soon as prudently practicable. These inspection records are maintained at the office of the Coordinator of Health, Safety, and Environmental Affairs for a minimum of three years.

8. The designated accountable person for oil spill prevention is required to review this plan and ensure "oil spill preparedness" on an annual basis. The designated individual shall review the material contained in this Plan, and sign and date the review form in Appendix E after the review is complete. A copy of this form shall be kept in the SPCC Plan file at the Western Connecticut State University Physical Plant for a minimum of three years.

Additional maintenance shop Standard Operating Procedures include:

1. Store drums and containers with fuel, grease, or oil in the Shop building or flammable materials shed. Do not store these materials outdoors.
2. Store drums and containers with fuel, grease, or oil in areas that provide secondary containment. Secondary containment capacity shall be equal to or greater than the capacity of the largest oil storage container in the area. Secondary containment currently in use at the shop includes the flammable material shed, poly-racks for drummed products, containment pallets for used oil drums, and flammable materials cabinets for smaller containers.
3. Drums and containers shall be placed into the proper containment as soon as prudently practicable after delivery.
4. When transferring or draining oil or coolants, all necessary precautions shall be used, including drain buckets and drip pans, to avoid spills.
5. The Maintenance Shop shall be operated as follows:
   - Keep aisles and exits free of obstructions;
   - Keep access to fire extinguishers clear; and
   - Keep fire extinguisher locations well marked.
6. The diesel fuel and gasoline ASTs shall be manually checked (i.e., dip stick measurement) prior to ordering fuels, and the quantities compared with the inventory.
7. University personnel shall be present during diesel fuel and gasoline deliveries to the fuel tanks greater than or equal to 1,000 gallons.
8. When fueling vehicles or equipment, do not leave dispensing nozzles unattended. Nozzles should not be equipped with automatic fill capabilities.

3.6 STRUCTURAL CONTROL CONSIDERATIONS

The "system" of controls will be used to prevent a discharge or minimize the potential for a discharge of oil in harmful quantities into or onto the navigable waters of the United States and their adjoining shoreline that consists of:

- Structural controls;
- Storage tank regulations compliance;
- Facility security measures;

- Personnel training regarding the facilities available and the procedures established to prevent oil spills and subsequent discharges;
- Routine inspections and recordkeeping; and
- Operating procedures that are specifically designed to minimize the potential for a release of oil.

In addition to this system of structural and non-structural controls, two other means will be used to achieve the goals of the SPCC Plan: 1) routine SPCC Plan effectiveness reviews with related plan amendments and 2) a "strong spill contingency plan." Through adherence to these considerations, University staff will maintain the SPCC Plan up to date and assure its continued effectiveness.

A "strong spill contingency plan" is also referenced in this SPCC Plan. This has been done because 40 CFR Part 112.7(d) allows that, if the installation of structures or equipment to prevent the discharge of oil to navigable waters is not practical, a strong spill contingency plan can be used. Even though structural and non-structural measures noted above are expected to be effective, a strong spill contingency will be implemented as well. The guidelines for the preparation and implementation of a SPCC Plan (40 CFR Part 112.7) require the use of "appropriate containment and/or diversionary structures or equipment to prevent oil from reaching a navigable water course." Structural controls that are mentioned for consideration for onshore facilities include:

- Dikes, berms, or retaining walls;
- Curbing;
- Culverting, gutters, or other drainage systems;
- Weirs, booms, or other barriers;
- Spill diversion ponds;
- Retention ponds; and
- Absorbent material.

Structural controls are in place and functioning for many oil storage activities. These structural controls include curbing, secondary containment, high level alarms, etc.

3.7 TANKS SYSTEM REGULATIONS COMPLIANCE

The following is a summary of some requirements that apply directly or indirectly to ASTs and USTs:

- The U.S. Environmental Protection Agency's (EPA's) SPCC program under the Clean Water Act applies to ASTs that may discharge petroleum products into U.S. navigable waters or adjoining shorelines;
- The NPDES stormwater permitting regulations under the Clean Water Act covered industrial activities that could involve ASTs.

- The air toxics provisions of the 1990 Clean Air Act amendments require lower routine emissions from certain ASTs and seek to prevent accidental releases of extremely hazardous substances.
- ASTs are also regulated under the Occupational Safety and Health Act. OSHA sets standards for the design, construction, and testing of vessels storing flammable and combustible liquids in the workplace. In addition, Section 126 of the 1985 Superfund Amendments and Reauthorization Act (SARA), directs OSHA to adopt standards to protect employees engaged in hazardous waste operations and emergency response. OSHA requires container labeling and the preparation of MSDSs to ensure that hazards are communicated to workers.

4.0 INSPECTIONS AND REVIEWS

4.1 DESIGNATED ACCOUNTABLE PERSON AND EMERGENCY COORDINATOR

The *designated accountable person* responsible for oil spill prevention and implementing the SPCC Plan is the Coordinator of Health, Safety, and Environmental Affairs. Western Connecticut State University's designated accountable person is required to review this Plan and ensure oil spill preparedness annually. Record of the annual review is kept with the Plan. Duties of the designated accountable person also include reviewing and maintaining inspection records for oil-bearing equipment and storage areas.

Control and cleanup of oil spills is the responsibility of the Emergency Coordinator (EC). The primary EC is the Coordinator of Health, Safety, and Environmental Affairs. Alternate ECs for Western Connecticut State University are listed in Appendix A. Appendix A includes telephone numbers for the designated accountable person, EC, and Alternate ECs in the spill notification list.

The EC is the central authority for emergency response procedures during an incident. Should an incident occur, the EC will establish a command post at the scene of the incident or other appropriate location. The EC will direct appropriate Western Connecticut State University personnel and outside support as necessary to respond to the incident, and will yield authority to Danbury fire department personnel, as appropriate. The EC has the authority to commit the necessary resources to adequately respond to incidents that may occur in order to protect human health and the environment.

4.2 INSPECTIONS

Monthly visual inspections of oil-bearing equipment, oil storage areas, and spill containment measures for storage in excess of 1,000 gallons at the campus are conducted by University personnel. Personnel observe oil-bearing equipment or ASTs, containment measures, and lighting, and note whether obvious leaks and/or damage are apparent, and prioritize actions and/or repairs that may be required. Monthly inspections are recorded on the inspection checklist forms included in Appendix D, and deficiencies are noted. Deficiencies are prioritized

and corrected as soon as practicable. The monthly inspection forms are maintained at the office of Coordinator of Health, Safety, and Environmental Affairs for a minimum of three years.

4.3 RECORD KEEPING

Records or clear photocopies of original records regarding the oil storage areas and oil-bearing equipment covered by this SPCC Plan shall be kept at the office of the Coordinator of Health, Safety, and Environmental Affairs, under the supervision the individual tasked with campus-wide regulatory compliance documentation maintenance. Records shall be maintained for as long as the specific oil storage area or piece of equipment is in operation, or for three years after the University is no longer required to have an SPCC Plan. Records that are kept include:

- A copy of the current SPCC Plan;
- Copies or originals of documentation that shows when the SPCC Plan was reviewed and the outcome of each review; and
- Copies or originals of monthly inspection forms.

The following records are kept at the Western Connecticut State University office of the Coordinator of Health, Safety, and Environmental Affairs:

- The Oil Spill Correspondence that is included in Appendix J. Copies of telephone logs/records documenting a notification to the EPA National Response Center and State of Connecticut Department of Environmental Protection (DEP) and other agencies as required by a reportable spill (maintained on file as long as the facility is subject to the regulation). Also included in Appendix J are completed spill reports, agency written correspondence, and the spill log summary that provides the historical spills. The spill log summary includes information on date of release, date reported to authorities, product released and quantities, location of release, response actions, reports filed, and authority contacted;
- List of personnel that received initial assignment training on pertinent aspects of the SPCC Plan and their responsibilities and duties, including date of training and instructor's name;
- List of personnel that received review/refresher training, including the date of the training and instructor's name; and
- Copies or originals of Western Connecticut State University's Oil Spill Report Forms.

4.4 SPCC PLAN AMENDMENTS AND REVIEWS

The SPCC Plan will be amended whenever there is a change in the design, operation, or maintenance of the facility that affects the potential for a discharge to occur. Any amendments will be implemented within six months after the change at the facility. In addition, the SPCC Plan will be reviewed at least every five years from the date of initial implementation (i.e., date of SPCC Plan certification by a Professional Engineer). A database management and tracking system has been implemented to trigger Plan review. If this review indicates that additional

field-proven and effective prevention measures are necessary, these measures will be implemented and the SPCC Plan will be so amended within six months of the review. Following any technical amendments (i.e., non-administrative changes), the revised SPCC Plan will be certified by a Professional Engineer.

The Plan will also be updated to reflect minor changes that do not significantly affect the potential for a discharge to occur, such as changes in telephone numbers or addresses for responsible personnel. These updates will not be certified by a Professional Engineer, but will be distributed to all recipients of the plan.

The SPCC Plan will also be amended if there are two discharges of oil in harmful amounts that violate applicable water quality standards or cause a film or sheen (40 CFR 110) to the navigable waters of the United States within a 12-month period, or if such a discharge involves over 1,000 gallons of oil. The regulations allow that the EPA Regional Administrator will review the SPCC Plan and may require amendments to be made. Within 60 days of the event triggering the review, Western Connecticut State University will submit to the EPA Regional Administrator and the Connecticut DEP the following information:

- Name and location of the facility;
- Name(s) of the owner or operator;
- Date and year of initial facility operation;
- Maximum oil storage capacity;
- Description of the campus, including topographical maps and other drawings;
- Complete copy of the SPCC Plan;
- Cause of the spill(s), including a failure analysis;
- Corrective actions and/or countermeasures taken;
- Additional preventive measures taken or contemplated to prevent a recurrence;
- Amendment made to the Plan to avoid the recurrence of discharges of oil; and
- Other information that may be reasonably required to review the Plan or the incidents.

After reviewing the above information and any comments received from the Connecticut DEP, the EPA Regional Administrator may notify the facility of any proposed amendments to the SPCC Plan necessary to prevent or contain future discharges. Western Connecticut State University will respond to the proposed amendment within 30 days from receipt of the proposal. The EPA Regional Administrator will either rescind the proposal or require that the amendment be made. The amendment will become effective 30 days after issue and must be implemented within six months. Any required amendment may be appealed to the Administrator of the EPA.

4.5 SPCC PLAN REVISIONS

Noted below are the SPCC Plan revisions to date for Western Connecticut State University.

Revision	Date	Engineer/State/No.	Description	Section

5.0 PLAN CERTIFICATIONS

5.1 WESTERN CONNECTICUT STATE UNIVERSITY ADMINISTRATION CERTIFICATION

This Spill Prevention Control and Countermeasures Plan for the Western Connecticut State University campus located in Danbury, Connecticut, has been reviewed and approved by the appropriate personnel at Western Connecticut State University. The procedures in this Plan will be implemented and will be amended, as necessary, due to expansions, modifications, and improvements at the campus.

Signature: _____

Luigi Marcone
Coordinator of Health, Safety, and Environmental Affairs
Telephone Number: (203) 837-9314
Western Connecticut State University
181 White Street
Danbury, Connecticut 06810

Date: _____

5.2 PROFESSIONAL ENGINEER'S CERTIFICATION

I certify that this Spill Prevention, Control, and Countermeasures (SPCC) Plan for Western Connecticut State University has been prepared in accordance with good engineering practices. Based on the information from the site visits to the Western Connecticut State University campuses located Danbury, Connecticut, by URS Corporation on June 13, 2002, and review of this SPCC Plan, I find that this Plan accurately describes these facilities and conforms to the provisions of 40 CFR 112.1 through 7. This certification is no longer valid when any change takes place at Western Connecticut State University that may have an effect on the potential for a discharge, or when the regulations imposing SPCC Plan requirements change, or after the deadline to review the continued applicability of this SPCC Plan has passed. It is understood that Western Connecticut State University also certifies that the descriptions of existing facilities, practices, and procedures are accurately described in the SPCC Plan.

Signature: _____

Engineer: Peter Sammis, P.E.
License No.: 11303 State: Connecticut

Date: _____

5.3 APPLICABILITY OF SUBSTANTIAL HARM CRITERIA

Western Connecticut State University has reviewed the Applicability of Substantial Harm Criteria found at 40 CFR 112.20 (f)(1), and has made the following determinations:

1. Does the facility transfer oil over water to or from a vessel and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

YES	NO √
_____	_____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?

YES	NO √
_____	_____

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using appropriate formula found in Appendix C to 40 CFR 112) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

YES	NO √
_____	_____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using appropriate formula found in Appendix C to 40 CFR 112) such that a discharge from the facility would shut down a public drinking water intake?

YES	NO √
_____	_____

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

YES	NO √
_____	_____

5.3.1 Applicability of Substantial Harm Certification

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

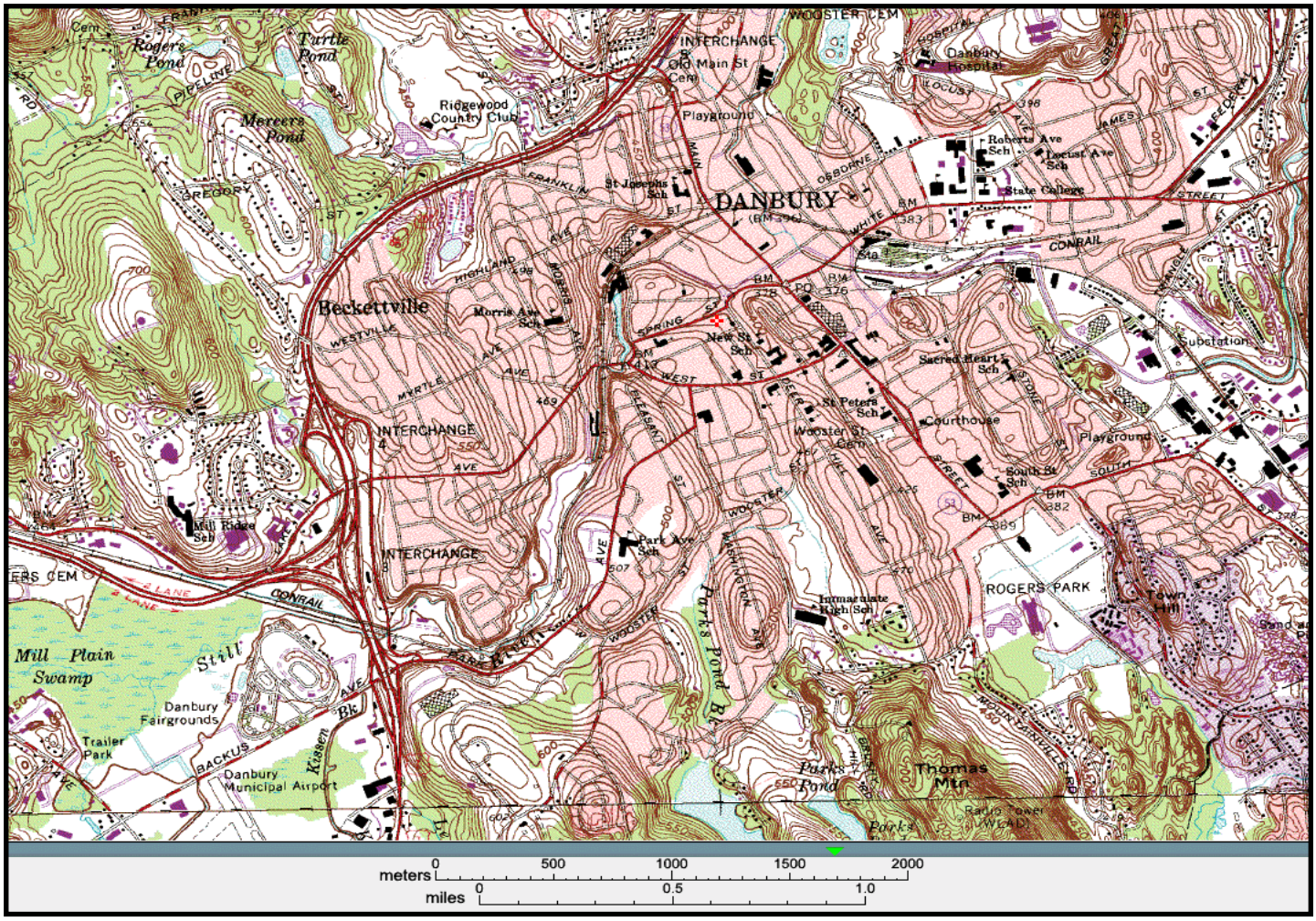
Signature: _____

Luigi Marcone
Coordinator of Health, Safety, and Environmental Affairs
Telephone Number: (203) 837-9314
Western Connecticut State University
181 White Street
Danbury, Connecticut 06810

Date: _____

FIGURES

Figure 1 Site Locus



N

WESTERN CONNECTICUT STATE UNIVERSITY	
MIDTOWN AND WESTSIDE CAMPUS **SPCC PLAN**	
YPΣ Χορπορατιον *115 Ωαττο Στρεετ, Συιτε 3, Ηαλλομελλ, Μαινε*	
SITE LOCUS MAP	**PROJECT NO.:** 51428-001
DESIGN: MLS	**SCALE:** AS SHOWN
APPROVED: PS	**DATE:** August 28, 2002
DRAWN: WAN	**FILE NO.:** LOCUS MAP
	FIGURE NO.: 1

Figure 2 Oil Storage/Oil-Bearing Equipment Locations at Midtown Campus

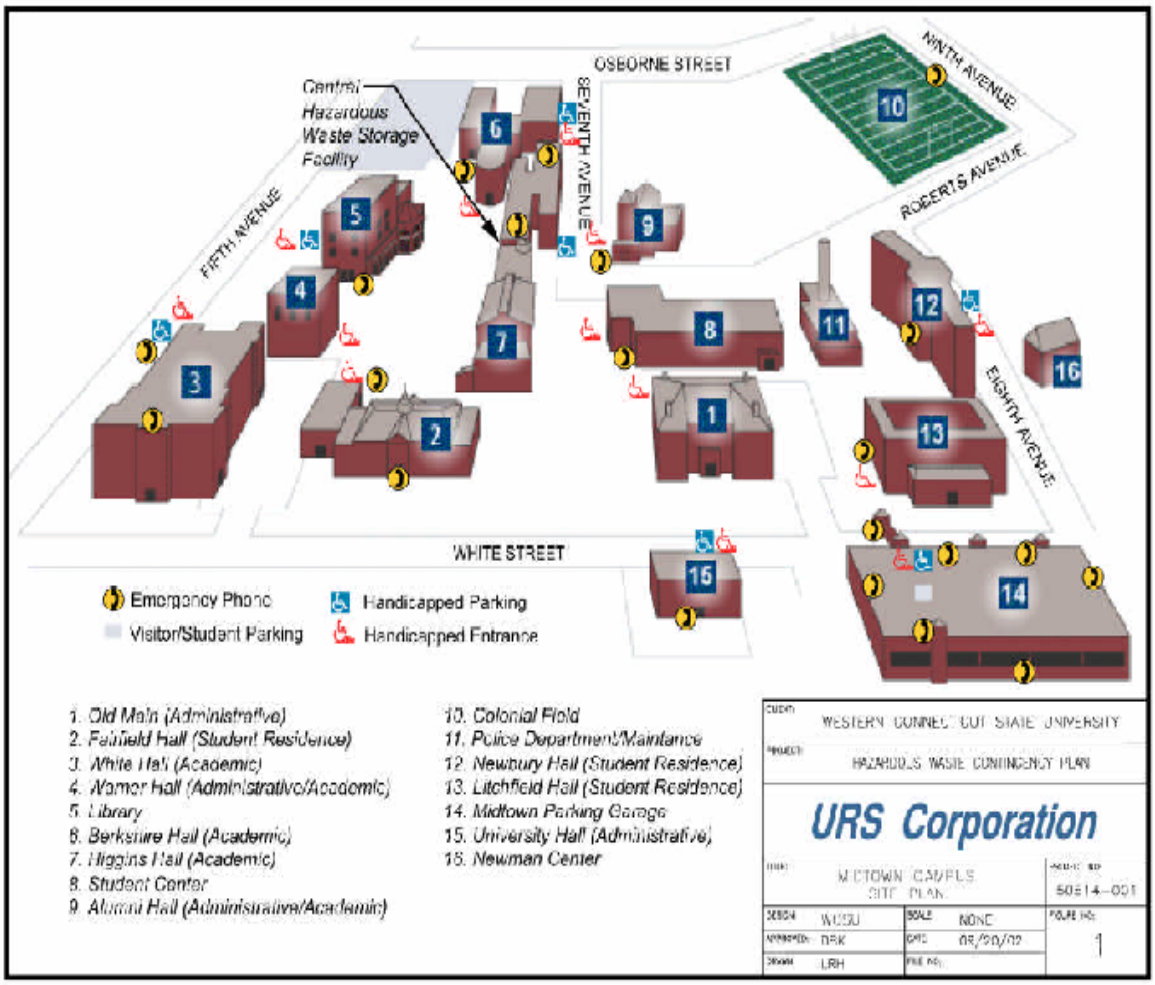


Figure 3 Oil Store/Oil-Bearing Equipment Locations at the Westside Campus

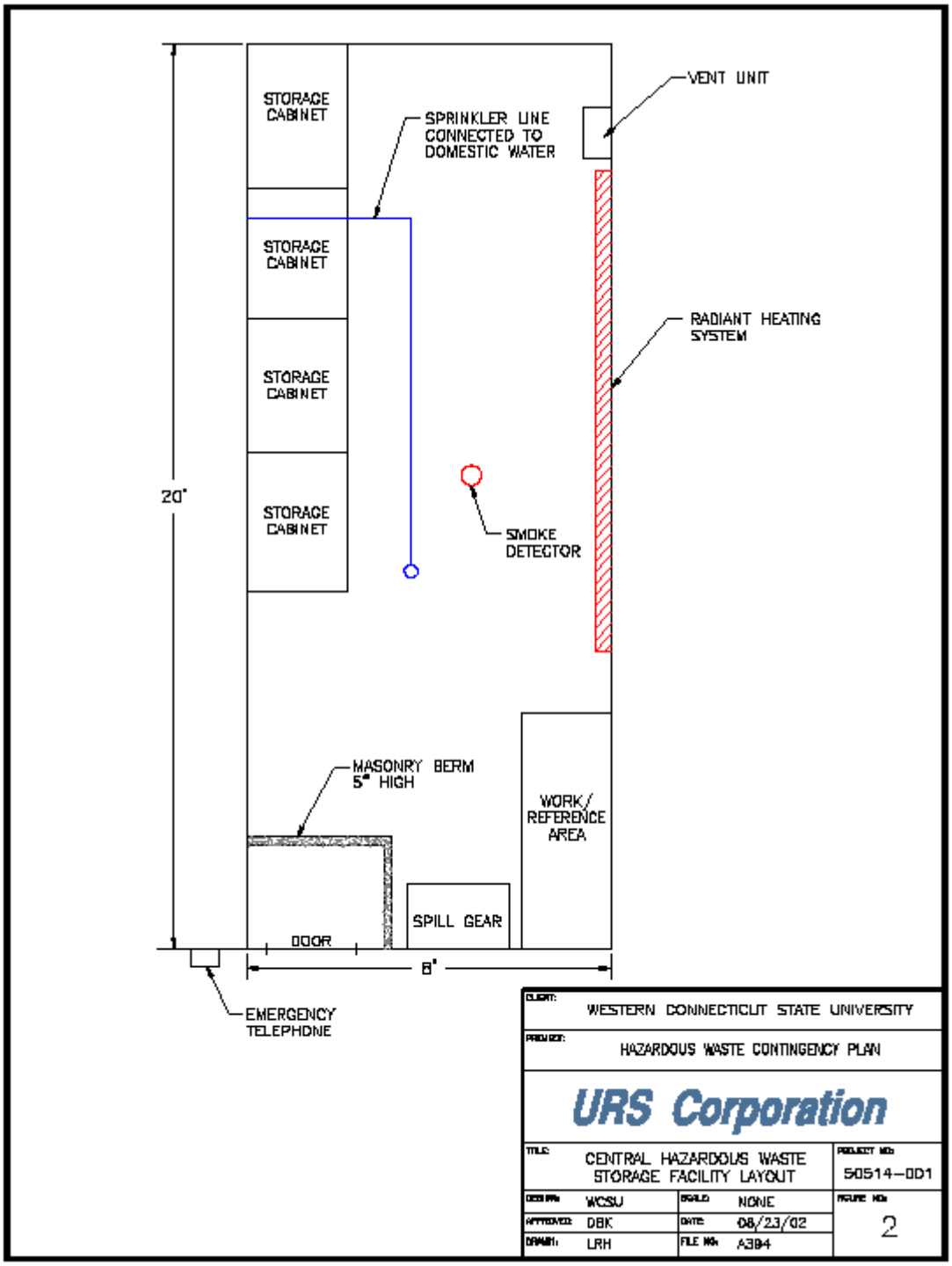
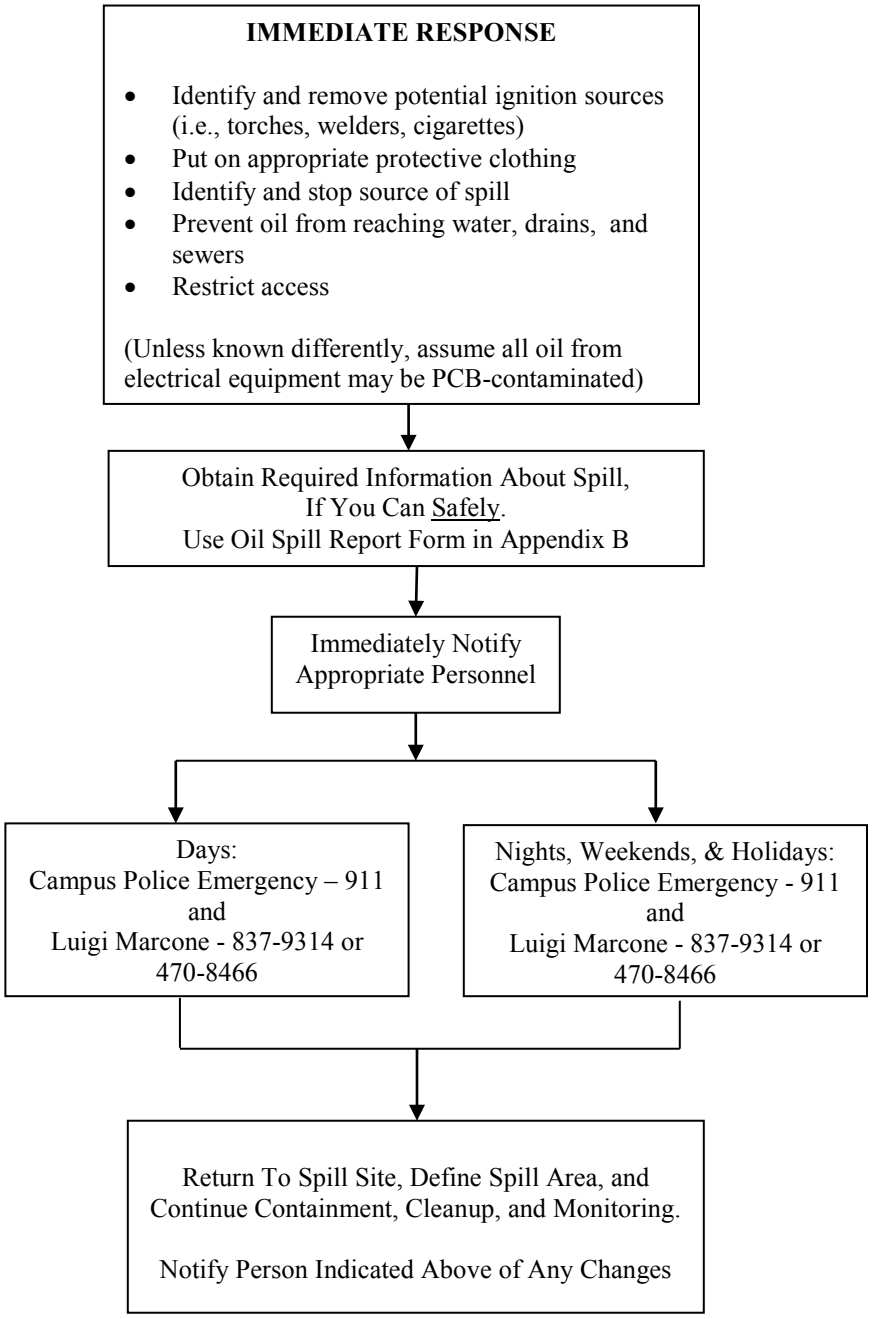


FIGURE 4

SPILL RESPONSE PROCEDURES FLOW CHART



See Appendix A for Notification List and General and Specific Spill Response Procedures

APPENDIX A

OIL AND HAZARDOUS MATERIAL SPILL REPORTING AND CLEANUP PROCEDURES

WESTERN CONNECTICUT STATE UNIVERSITY
NOTIFICATION LIST

Western Connecticut State University Physical Plant

Spill Response Coordinator

Luigi Marcone, Coordinator
Health, Safety, and Environmental Affairs
181 White Street
Danbury, CT 06810

Office: 203-837-9314
Facsimile (fax): 203-837-9317
Cellular: 203-470-8466
Home 203-778-8100
3 High Lake Dr.
Bethel CT. 06801

Alternate Emergency Coordinator

??????

Western Connecticut State University Police Department

Chief Neil McLaughlin, Jr.
Chief of Police
181 White Street
Danbury, CT 06810

Office: 203-837-9308
Pager: 203-224-7108
Cellular: None
Home: 860-582-7602
42 Cross Road
Terryville, CT 06786

LT Roger Connor
181 White Street
Danbury, CT 06810

Office: 203-837-9308
Pager: 203-581-8012
Cellular: 203-994-3657
Home: 203-426-7926
132 Hattertown Road
Newtown, CT 06470

Spill Response Contractors

Environmental Services, Inc.
9 Brookfield Street
South Windsor, CT 06704

Office: 860-528-9500

Fleet Environmental Services LLC
3 Trowbridge Drive
Bethel, CT 06801

Office: 203-744-3477

Local, State and Federal Agencies

National Spill Response Center (NSRC)	(800) 424-8802
Danbury Fire Department	**911** or 203-796-1550
Connecticut Department of Environmental Protection (24-Hour Spill Report)	203-424-3338
State Police Headquarters	203-685-8310

Medical

Danbury Emergency Medical Service (EMS)	**911** or 203-796-1550

WESTERN CONNECTICUT STATE UNIVERSITY
GENERAL SPILL RESPONSE PROCEDURES

- **Safety is the first priority**. Attempt to stem flow by shutting valves. If you are not sure that you can safely respond to the spill, **MAKE NOTIFICATIONS and WAIT** for help.

- Material Safety Data Sheets (MSDS) in the Public Safety Office provide the information needed to ensure adequate personnel protection when dealing with spills.

- If you smell unknown or petroleum vapors in an enclosed area, CALL 911. Some vapors may cause suffocation if inhaled or may explode if ignited.

- If you are not aware what material has spilled, to prevent a potential health hazard, STAY upwind and upgrade.

- If the spill is on fire or other health hazards are present, DO NOT attempt to stop or contain the spill.

- REQUEST all unnecessary personnel stand clear of area.

- If any personnel are injured, CALL 911 for medical assistance.

- **NOTIFY University Police** who in turn will contact the Emergency Coordinator (or alternate) on Notification List.
  DO NOT DELAY contacting other personnel if you are unable to reach the desired party.

- PERFORM a preliminary classification of the event as follow:

  - Estimate the volume of the spill.
  - Attempt to identify the source of the spill.
  - Identify the product/material involved in the spill.
  - Begin to complete the Oil Spill Response Form.

- RECORD the sequence of events (actions taken and time) as they are performed to respond to the spill AND CONTINUE to use the report form until the spill response is terminated.

- NOTIFY the appropriate Oil Spill Response Organization (OSRO) personnel.
- Where possible, SPREAD absorbent pads or booms at edge of oil to prevent spreading.

- CONSTRUCT temporary dikes, trenches, and excavations to prevent or restrict the flow from entering the water if conditions permit.

- If the spill appears to affect adjacent residences (e.g., drinking water well contamination, hazardous vapors), NOTIFY the property owners through police and fire officials.

APPENDIX B

OIL SPILL REPORT FORM

Western Connecticut State University
Oil Spill Report Form

Facility:
Revision: 0
Date:
Page 1 of 2

Incident Date / Time / Duration:

Substance Involved: _____

Quantity Released: _____

Cause: _____

Immediate Action:

Preventive Measures:

Offsite Impact / Reactions:

Other Comments:

Western Connecticut State University
Oil Spill Report Form

Facility:
Revision: 0
Date:
Page 2 of 2

Date/Time of Call: ____________________
Agency Contacted: ____________________
Official Contacted: ____________________
Telephone No: ____________________
Person Reporting: ____________________
Comments: ____________________

Date/Time of Call: ____________________
Agency Contacted: ____________________
Official Contacted: ____________________
Telephone No: ____________________
Person Reporting: ____________________
Comments: ____________________

Date/Time of Call: ____________________
Agency Contacted: ____________________
Official Contacted: ____________________
Telephone No: ____________________
Person Reporting: ____________________
Comments: ____________________

Date/Time of Call: ____________________
Agency Contacted: ____________________
Official Contacted: ____________________
Telephone No: ____________________
Person Reporting: ____________________
Comments: ____________________

Date/Time of Call: ____________________
Agency Contacted: ____________________
Official Contacted: ____________________
Telephone No: ____________________
Person Reporting: ____________________
Comments: ____________________

APPENDIX C

CORRECTIVE ACTION RECOMMENDATIONS

URS Corporation recommends that Western Connecticut State University implement the following corrective actions to improve spill prevention and control.

1. Ensure that fuel delivery contractors have spill containment kits on the delivery vehicles.

2. Evaluate placing temporary covers (e.g., magnetic covers) over catch basins in the vicinity of tank filling operations.

3. Install security fence (e.g., chain-link fence topped with barbed wire) to enclosed the AST and emergency generator at Pinney Hall and to enclose the Westside Campus maintenance shop and associated ASTs.

APPENDIX D

MONTHLY TANK SYSTEM INSPECTION CHECKLIST

Western Connecticut State University
Monthly Inspection Checklist
(for tanks larger than 330 gallons)

Facility _____
Completed by _____
Title _____
Inspector Address _____
Date _____

Do You See:	**Yes**	**No**	**N/A ***
Corroded or damaged tanks, tank supports, and/or tank drain valves?			
Corroded or leaking pipes?			
Leaking or improperly closed valves or valve fittings?			
Complete Spill Response Kit in good condition?			
Broken or cracked dikes, walls, or other physical barriers designed to prevent spills from reaching stormwater?			
Improperly maintained or overloaded piping systems?			
Area alarm and monitoring systems functioning properly?			
Areas Inspected:			
Problems Found: _____ _____ _____ Persons Notified: _____ _____			

***N/A = Not Applicable**

Inspector Certification: I certify that the inspection has been performed in a manner consistent with applicable regulations
Inspector Signature: _____

APPENDIX E

SPCC PLAN REVIEW SHEET

SPCC PLAN REVIEW SHEET
WESTERN CONNECTICUT STATE UNIVERSITY

The designated person accountable for oil spill prevention and personnel responsible for inspections and response shall complete annual reviews of the Spill Prevention, Control, and Countermeasures Plan for Western Connecticut State University. Please review the material contained in this Plan, and sign and date below after the review is complete. A copy of this form shall be kept in the SPCC Plan file at the Western Connecticut State University, Office of the Coordinator of Health, Safety, and Environmental Affairs, for a minimum of three years.

PRINT NAME	SIGNATURE	DATE

APPENDIX F

RECEIVING OIL DELIVERIES

WESTERN CONNECTICUT STATE UNIVERSITY

Title: Receiving Oil Deliveries.
Objective: **To assure oil is transferred from the shipping vehicle to the storage area without a spill occurring.** (for tanks larger than 1,000 gallons)
Frequency: As needed at each shipment.
Record: Maintain copy of manifest.
Procedure:
Date: _____

	M	T	W	T	F	S	S
1. The transport truck driver will be directed to the unloading area.							
2. The transport truck is secured. This may include the emergency brakes, parking in gear, or chocks placed behind/front of the wheels							
3. Check shipping papers with truck contents (container labels). Check containers to assure that they are in good condition (no dents, rust, leakage, etc.). Plant personnel will verify that truck placards are appropriate.							
4. Plant personnel will verify the volume of the shipment with the driver and assure that there is adequate available capacity to accommodate the load							
5. If all criteria are met, begin unloading of truck contents							
6. The shipping papers/manifest will be signed then turned in to the main office.							

APPENDIX G

CONTRACTOR EMERGENCY PROCEDURES

To be inserted by WCSU

APPENDIX H

DRAINING OF STORMWATER FROM SPILL CONTAINMENT STRUCTURES

WESTERN CONNECTICUT STATE UNIVERSITY

Title: Draining of Stormwater from Spill Containment Structures.
Objective: To drain only stormwater from spill containment structures and sumps.
Frequency: Within 24 hours after a precipitation event or once the snow or ice has melted.
Records: Containment Structure Draining Log.
Procedure:
Date: _____

	M	T	W	T	F	S	S
1. Do not allow snow or ice melt to build up to a point where the liquid has reduced the containment capacity. The goal is to operate containment structures free of liquid so as not to reduce the containment capacity.							
2. Observe the surface of the liquid collected in the containment structure for signs of oil such as a sheen or discoloration or other chemical.							
3. If the stormwater is not acceptable for release to a surface water, dispose of it in full compliance with all applicable laws and regulations by contacting the Chemistry Facility Manager.							
4. During the stormwater draining action, continue to monitor the oil holding tanks or containers for new leaks and stop draining if a new leak is discovered.							
5. Immediately after draining all the water, close the drain valve and lock it or lock out the sump pump.							
6. Document the entire process in a log including date and time and person in control of the draining operation.							

APPENDIX I

CONTAINMENT CALCULATIONS

SECONDARY CONTAINMENT CALCULATIONS

BOILER HOUSE CONTAINMENT SYSTEMS
SHALLOW TROUGHS UNDER BOILERS

INTERIOR CONTAINMENT MEASUREMENTS
LENGTH: 20 ft
WIDTH: 8 ft
DEPTH: 0.08 ft

Total Containment Volume = 20 ft x 8 ft x 0.08 ft = 13 cubic feet
Total Containment Volume = 13 cubic feet x 7.48 gal/cubic foot = 100 gallons

---

BOILER HOUSE CONTAINMENT SYSTEMS
PIPING TROUGHS IN FLOOR

INTERIOR CONTAINMENT MEASUREMENTS
LENGTH: 100 ft
WIDTH: 4 ft
DEPTH: 2 ft

Total Containment Volume = 100 ft x 4 ft x 2 ft = 800 cubic feet
Total Containment Volume = 800 cubic feet x 7.48 gal/cubic foot = 6,000 gallons

---

WESTSIDE CLASSROOM BUILDING BOILER ROOM
PIPING TROUGHS IN FLOOR

INTERIOR CONTAINMENT MEASUREMENTS
LENGTH: 30 ft
WIDTH: 1.5 ft
DEPTH: 1 ft

Total Containment Volume = 30 ft x 1.5 ft x 1 ft = 45 cubic feet
Total Containment Volume = 45 cubic feet x 7.48 gal/cubic foot = 340 gallons

O'NEILL ATHLETIC CENTER BOILER ROOM FUEL PUMP CONTAINMENT

INTERIOR CONTAINMENT MEASUREMENTS
LENGTH: 5 ft
WIDTH: 4 ft
DEPTH: 0.67 ft

Total Containment Volume = 5 ft x 4 ft x 0.67 ft = 13 cubic feet
Total Containment Volume = 13 cubic feet x 7.48 gal/cubic foot = 100 gallons

---

12,000-GALLON NO. 2 FUEL OIL AST AT A. SEARLE PINNEY HALL

INTERIOR CONTAINMENT MEASUREMENTS
LENGTH: 45 ft
WIDTH: 9 ft
DEPTH: 4.5 ft

Total Containment Volume = 45 ft x 9 ft x 4.5 ft = 1,820 cubic feet
Total Containment Volume = 1,820 cubic feet x 7.48 gal/cubic foot = 13,600 gallons

APPENDIX J

OIL SPILL CORRESPONDENCE

To be inserted by WCSU

APPENDIX K

STORAGE TANK REGISTRATION FORMS

Note:
The Tank Registration Forms To Be Inserted by WCSU

APPENDIX L

SPCC PLAN PERSONNEL TRAINING LIST

WESTERN CONNECTICUT STATE UNIVERSITY

SPCC PLAN TRAINING PERSONNEL LIST

The following individuals have reviewed the Western Connecticut State University Spill Prevention, Control and Countermeasures Plan and are familiar with the procedures contained therein.

Name	Title/Position	Date of Review	Signature

APPENDIX M

CATHODIC PROTECTION O&M AND SURVEY REPORTS

To be inserted by WCSU