

3.1.22

EMS Aspects: Diesel Fuel Storage, Maintenance, Water/Hazardous Materials

Aspect Ranking: 6

Diesel fuel is stored on campus for use in the event of emergency power outages. Diesel fuel tanks are operated and maintained by Maintenance and Operations, a department of Facilities, Planning and Engineering at The University of Texas Health Science Center at Houston (UTHSC-H).

Diesel Fuel – Water Discharges & Hazardous Materials

Task/Activity Description:

The University of Texas- Health Science Center at Houston has developed a Spill Prevention, Control & Countermeasures plan (SPCC) according to the requirements set forth in 40 CFR Part 112.

Table 1 below, presents a summary for each petroleum storage tank at UTHSC-H and associated properties. The table includes the following information: building location of the tank, type of tank (aboveground or underground), tank storage capacity, and petroleum product stored.

Above Ground Storage Tanks (AST) and Underground Storage Tanks (UST)

Table 1 – UTHSC-H AST & UST Locations and Maximum Capacity

DESCRIPTION	LOCATION	FUEL	TYPE	CAPACITY
Medical School Building	6431 Fannin	Diesel	AST	6000 gallon
Mental Sciences Institute	1300 Moursund	Diesel	AST	2000 gallon
Operations Center Building	1851 Crosspoint Ave.	Diesel	AST	2000 gallon
Harris County Psychiatric Center	2800 South MacGregor Way	Diesel	UST	2000 gallon
UT Professional Building AE, Parking Garage	6410 Fannin	Diesel	AST	250 gallon
University Central Tower	7000 Fannin	Diesel	AST	500 gallon
Auxiliary Enterprises – Student Housing	1885 El Paseo	Diesel	AST	300 gallon
Dental Branch – MDA Basement	6516 MD Anderson Blvd.	Diesel	AST	300 gallon

Key Control Points:

-Medical School Building, 6431 Fannin Street, Houston, TX 77030

The AST is surrounded by a 3.5 ft x 13.4 ft x 18.5 ft concrete dike, which provides secondary containment in the event of a spill caused by overfilling or a breach of the tank. The volume of the dike is 6490 gallons.

-Mental Sciences Institute, 1343 Moursund, Houston, TX 77030

The AST is surrounded by a 2 ft x 8.7 ft x 16.7 ft concrete dike, which provides secondary containment in the event of a spill caused by overfilling or a breach of the tank. The volume of the concrete dike is 2174 gallons.

-Operations Center Building, 1851 Crosspoint Avenue, Houston, TX 77054

The AST is surrounded by a 2.6 ft x 9 ft x 15 ft concrete dike, which provides secondary containment in the event of a spill caused by overfilling or a breach of the tank. The volume of the concrete dike is 2625 gallons.

Spill equipment is readily available to absorb or contain a release. During a catastrophic release, notification would be made to an UT System contracted cleanup contractor.

Miscellaneous Oil Storage

Additional sites with bulk oil storage greater than 55 gallons and less than SPCC required aggregate volume thresholds for AST's or UST's, although not required, are included into the formal SPCC plan, as "Miscellaneous Oil Storage" areas. These include the following locations:

-Harris County Psychiatric Center (HCPC)

This is the only UST owned by UTHSC-H and is self-certified according to the requirements in 30 TAC 334(A)(c) on an annual basis.

-UT Professional Building- Parking Garage

This site contains a 350-gallon day tank under the emergency generator in the first floor parking garage. The tank and generator set is surrounded by a secondary containment berm, and additional fuel is stored in 55-gallon drums in fire rated metal cabinets.

-University Center Tower

This site contains a 500-gallon AST located on the 6th floor roof of the University Center Tower parking garage. It is surrounded by a secondary containment basin that will hold the volume of the tank.

-Auxiliary Enterprises (AE) - Student Housing

This site contains a 300-gallon diesel AST utilized by a fire pump. This bulk oil storage tank is a double walled and is located in an enclosed pump room.

Related Forms, Records, SOPs:

- Spill Prevention Control and Countermeasures Plan

- EHS Record of Gen Set & Tank Surveys
- EHS Equipment List – Diesel Storage Tanks

Responsible Personnel:

AE Student Housing Maintenance Supervisor; AE, UTPB Maintenance Superintendent; OCB, UCT, MSB, MSI Maintenance & Operations Manager; HCPC, Director of Facilities Support

- Ensure timely maintenance of noted AST/UST deficiencies
- Ensure filling operations are managed appropriately during fuel or oil delivery
- Inform EHS of any environmental releases and ensure corrective action are implemented
- Participate in environmental training programs.

EH&S, Environmental Protection Safety Specialist

- Conduct semi-annual surveys of facilities to ensure compliance with the provisions of the plan
- Conduct quarterly visual inspections of AST's and document in EHSA
- Investigate environmental releases
- Coordinate training and maintain training records
- Update the SPCC Plan as required
- Make emergency information available to the UTHSC-H community
- Provide guidance to responsible personnel

EH&S, Environmental Protection Manager

- Review items of non-compliance noted in Safety Specialists surveys
- Evaluate performance of this plan

EH&S, Director of EH&S

- Provide management overview and liaison with VP of Facilities, Planning and Engineering, and VP of Auxiliary Enterprises.

Environmental Compliance (Diesel Fuel Storage) Program

Task/ Activity Description

Generator set/emergency engine survey

Schedule: Semi-Annual (December, June)

Diesel Fuel Storage Tank Visual Inspection

Schedule: Quarterly (January, April, July, October)

The Environmental Health & Safety Department's Environmental Protection Program conducts semi-annual surveys of the emergency generator sets and the emergency fire pump engine at new student housing. Items inspected include general safety concerns, possible environmental impacts, and waste issues generated from routine maintenance of associated diesel generators and emergency engines. Spill control equipment should be available at all locations.

Deficiencies for semi-annual surveys are noted on the survey form by checking the "yes, no, or not applicable" boxes or by adding items to an additional comments section on the survey form. Once the survey is complete, a memo listing any noted deficiencies and corrective actions is sent to the appropriate maintenance supervisor. Deficiencies noted during the survey are tracked for resolution utilizing Environmental Health Safety Assistant (EHSA) database. As part of the deficiency tracking process, at least thirty days are given to correct any deficiencies, before potentially escalating enforcement actions.

Diesel fuel storage tanks are visually inspected on a quarterly basis for tank integrity, condition of secondary containment, and condition of secondary containment drain valves.

Deficiencies for visual tank inspection are noted in the equipment menu utilizing EHSA and facilities maintenance is notified by email or by calling the FIXT (x3498) phone request system.

Key Control Points

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Owner: EH&S/EPP – AWL

Reviewed: AWL 8/20/2007; CSC pending

Maintaining the integrity of diesel storage tanks is the desired result to this survey inspection. If corrosion is detected, written notice is made to the appropriate responsible personnel. The appropriate personnel are to ensure repairs or replacement is made to the tank to prevent unnecessary spills.

Related Forms, Records, SOPs:

- Quarterly surveys of diesel storage tanks
- Spill Prevention Controls and Countermeasure Plan
- EHSA

Annual Training – Environmental Management Systems and Environmental Awareness

Task/Activity Description:

To communicate to these environmental programs to responsible personnel, the Environmental Protection Program provides training on an annual basis. This training introduces and reinforces environmental management system principles, waste management practices specific to the AE business unit's operations, and environmental concerns and compliance requirements for storm water, air emissions, hazardous materials management, and a brief overview of the SPCC plan. The training is lead by an instructor, and the training materials are available on the EH&S web page.

Key Control Points:

Communicate environmental compliance requirements, environmental management system concepts, and SPCC procedures to personnel who manage the diesel storage tanks.

Routine Management of Fuel Oil Storage to meet regulations:

SPCC plan requirements, Oil Pollution Prevention (40 CFR 112)

The purpose of this rule is to prevent the discharge of oil into navigable waters and shorelines of the United States; as opposed to the response and cleanup after a spill occurs.

UST & AST Storage Tank, (30 TAC 334)

Certain petroleum storage tanks (PST's) are required to be registered with the Texas Commission on Environmental Quality. Upon the refueling of these PST's, the proof of registration must be shown.

Spill Prevention & Control, Reportable Quantities (40 CFR 302.4)

If a release or spill occurs (equal to or in excess of a listed reportable quantity) an EH&S representative will contact all required federal, state, and local environmental agencies, as required by law.