

## Underground Storage Tank Program

Responsible Administrator: Environmental Compliance Specialist  
Revised: August 2023

**Summary:** The University of California, Irvine (UC Irvine) Underground Storage Tank (UST) Program provides guidance to operators responsible for maintaining tank systems to comply with Federal, State, and local laws and regulations.

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### 1. Program Description

The UC Irvine UST Program provides guidance to the campus in UST management as well as surface and ground water pollution prevention. The program also provides compliance guidance on State Water Resources Control Board (SWRCB) and other UST requirements.

UST Program activities include:

- Monitoring, recordkeeping, and reporting activities.
- Administering Orange County Certified Unified Program Agency (CUPA) - Health Care Agency / Environmental Health Permit to Operate submittals.

### 2. Scope

This program applies to all entities within the UC Irvine campus. This program details the elements that are required of the UST Program for the campus to maintain compliance with all Federal, State, and local UST laws and regulations.

### 3. Definitions

- **Underground Storage Tank** – A tank or combination of tanks and connected piping having at least 10% of their combined volumes underground. Applies to tanks storing over 110 gallons of petroleum products or hazardous substances.

### 4. Responsibilities

- Tank Operators
  - Maintain all written monitoring records.
  - Follow all monitoring procedures.
  - Immediately report all unauthorized releases of hazardous materials to Environmental Health and Safety (EHS).
- EHS Environmental Management Division

- Prepare and submit all the necessary permit applications and fees.
- Serve as a regulatory agency liaison.
- Report all unauthorized releases of hazardous materials to the CUPA.
- Develop and update the Hazardous Materials Business Plan (HMBP).

## 5. Program Components

This document provides guidance to UST operators responsible for maintaining tank systems in compliance with Federal, State, and local laws and regulations.

- Administrative
  - Written Monitoring Procedures: Written leak detection monitoring procedures must exist and include:
    - Frequency of the leak detection monitoring.
    - Methods and equipment used to perform the leak detection monitoring - Underground Storage Tank Monitoring Plan.
  - Written Monitoring Records: All leak detection monitoring records are maintained on site, including but not limited to:
    - Maintenance records for the last 3 years (including periodic equipment calibration).
    - Hazardous Materials Monitoring System Inspection Form -Inspection log verifying that the leak detection system has power and is not in alarm.
    - Alarm printouts (for electronic leak detection equipment).
    - Groundwater or vapor well sampling records (if applicable).
    - Inventory reconciliation records.
    - Location of monitoring probes and control (alarm) units.
  - Written Emergency Response Plan: The written emergency response plan outlined in the Hazardous Materials Business Plan (HMBP) includes:
    - Contact information for equipment service or to investigate alarm conditions.
    - Procedures for notifying the local fire/hazardous materials agency.
- UST - Hazardous Material Dispensing Units
  - Hoses and Nozzles: Hoses are not crimped or collapsed. Nozzles are product tight.
    - Leaks/Weeping Joints: Pipes are not leaking. Joints are not weeping.
    - Containment: The containment and/or area under the dispensers must always be kept dry. Fuel filters are carefully removed to avoid spillage into the containment and/or area under the dispensers.
    - Fittings/Hose Connectors: Fittings and hose connectors are not disconnected.
    - Electrical: Electrical wires are not exposed.
    - Shear Valves: Shear valves must be installed under dispensers to stop product flow resulting from an accident that damages the dispenser. These valves must be inspected periodically to verify that they are functional.
- Underground Tanks/Piping
  - Overspill Containment: Each tank fill opening must be equipped with an overspill container of at least a five (5) gallon capacity. The container is connected to the tank via a plunger or drain. The container must always be maintained in a dry condition.
  - Overfill Prevention: To prevent tank overflow during product delivery, each tank must be equipped with either:
    - A mechanical "flapper-valve" tube which is inserted inside the product fill tube.
    - An electronic sensor that alarms when delivered product reaches 95% of the tank capacity.
  - Manway Sumps: All manway sumps must be maintained in a dry condition. Leakage must not occur from pipeline detectors or other equipment located inside the sumps. In addition, sumps containing liquid sensors must be located at the bottom of the sumps.

- Leak Detection Equipment
  - Leak Detection System: An approved leak detection monitoring system or program must be installed and functioning properly.
  - Inspections: All leak detection equipment must be visually inspected on a monthly basis to verify that:
    - There is power to the equipment.
    - The equipment is not in alarm.
  - Calibration: All leak detection equipment must be tested and calibrated at least annually.
- Designated UST Operator
  - Effective January 1, 2005, UC Irvine will assign a Designated UST Operator who has passed the operator exam administered by the International Code Council. A certified contractor may be utilized to fulfill this requirement.
  - Effective July 1, 2005, and annually thereafter, the Designated UST Operator will train facility employees in the proper operation and maintenance of the UST system.
  - UC Irvine employees hired on or after July 1, 2005, must complete initial training within 30 days of the hire date.
- Miscellaneous
  - Emergency Shut-off Switch: A master Emergency Shut-Off Switch must be in an accessible area within sight of all dispensers. This switch must always be labeled and maintained in working condition.
  - Fire Extinguishers: Fire extinguishers with a minimum rating of 2-A:20-B:C must be in accessible areas no further than 50 feet from pumps and dispensers. It is the responsibility of the tank operator to ensure all extinguishers have been serviced within the last 12 months (verifiable via service tag).
  - Cathodic Protection: For steel tank systems, a cathodic protection system must be installed to protect tank(s)/piping from rusting and deterioration. The tank operator must inspect the system once every three months.
  - Secondary Containment Testing: All secondary containment systems installed prior to January 1, 2001 must have secondary containment testing every 36 months by a certified UST testing contractor.
  - Signs: The following signs must be posted next to the UST's:
    - "Smoking Prohibited"
    - "Dispensing into Unapproved Containers Is Prohibited"
    - "Vehicles Must Stop During Fueling Operations"

<p>IN CASE OF FIRE OR SPILL</p> <ol style="list-style-type: none"><li>1. Use emergency pump shutoff!</li><li>2. Report the accident!</li></ol> <p style="text-align: center;">Fire Department No. 911 Facility address _____</p>
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## 6. Reporting Requirements

- EHS must provide pertinent notifications to the CUPA and payment of UST permit fees.
- EHS must submit applicable CUPA unified program forms relevant to UST management.

## 7. References

### Laws and Regulations on UST Management

#### State Laws

- Underground Storage of Hazardous Substances Health and Safety Code § 25280-25299.8

#### Federal Laws

- Resource Conservation and Recovery Act 42 USC § 6691 (RCRA) Underground Tank Provisions

#### State Regulations

- Underground Storage Tank Regulations 23 CCR § 2610-2729.1

#### Federal Regulations

- Underground Storage Tank Regulations 40 CFR § 280-282