

UNDERGROUND STORAGE TANKS (USTs): MOTOR FUEL, USED OIL AND EMERGENCY GENERATORS

Introduction

The Arizona Department of Environmental Quality regulates underground storage tanks (USTs). This sheet outlines the regulatory requirements and suggests best management practices to assist with compliance assurance for USTs that store motor fuel, used oil and fuels for emergency generators. The fuels stored include gasoline, diesel, and used fuel oils.

Definitions

UST System: An underground storage tank, connected underground piping, underground auxiliary equipment and containment system if any. 10% or more of the tank volume and piping must be underground. A UST does not include a free-standing container within a building.

Flammable and Combustible Liquids: A flammable liquid is any liquid having a flash point below 100 °F. Flammable liquids are known as Class I liquids and are divided into the following classifications: Class IA, Class IB and Class IC (depending on flash point levels). A combustible liquid is any liquid having a flash point at or above 100 °F. Combustible liquids are also known as Class II or Class III liquids

Applicable Regulations

- ARS 49-1001-1093, Chapter 6, Title 49 (UST Statutes)
- Arizona Administrative Code, Chapter 12, Title 18 (UST Program Rules)
- 40 CFR Part 280 -Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)

Summary of Requirements

This section provides an overview of the operational requirements for motor fuel, used oil and emergency generator USTs set forth in Arizona Administrative Code. USTs are subject to regulatory requirements for spill containment, overfill prevention, release response and tank abandonment/removal. In addition, this section presents several best management practices related to USTs.

Registration

ADEQ requires that all motor fuel, used oil and emergency generator USTs be registered with the Department of the Environmental Safety (EH&S). EH&S prepares registration forms and can provide assistance with USTs permitting issues.

1. **Spill Containment and Overfill Protection:** All existing motor fuel, used oil and emergency generator USTs (installed prior to December 22, 1988) must be retrofitted with a spill and overfill prevention device on or before December 22, 1998. An overfill prevention device may include an automatic flow shut-off or a high level alarm to prevent overfill.
2. **Release Detection:** All new and existing USTs must be monitored for releases. Arizona Administrative Code specifies various methods of release detection including: inventory control; manual tank-gauging; precision tightness testing; automatic tank gauging and vapor monitoring; groundwater monitoring; and interstitial monitoring.
3. **Response to Releases:** In the event of a leak or spill, whether determined by testing or otherwise, the following steps must be taken:
 - EH&S must be notified immediately;
 - The ADEQ must be notified within twenty four (24) hours of a suspected release;

- If a release is suspected and reported, an investigation must be initiated within 72 hours and an investigation must be completed within 90-days from the suspected release date;
- A 14-day report (from the date of suspected release) must be submitted to ADEQ
- If testing indicates that the source of the release is the tank, the tank must be emptied of all its product immediately;
- If the piping is found to be the source of the release, the piping must be immediately drained and removed from use.

ADEQ will determine immediate response actions. EH&S is responsible for assisting with response to releases.

4. Tank Abandonment and/or Removal: 30 days prior to any UST removal, EH&S must notify ADEQ.

Arizona Administrative Code identifies ADEQ's closure requirements which include removal of product; tank purging; disconnecting lines and capping; removal of product saturated soils; and necessary site assessment for contamination and corrective action.

In some instances, USTs may be located under a building or in a location such that its removal could endanger the structural integrity of another tank or structure. In these cases, USTs may be abandoned in-place with ADEQ's approval and must meet specific abandonment requirements.

5. Prohibitions: Although not explicitly stated in Arizona Administrative Code, the storage of waste oil in operating fuel oil USTs is strictly prohibited. This practice constitutes an illegal hazardous waste management practice.

6. Best Management Practice: Although not a regulatory requirement, it is recommended that fuel oil USTs be tested annually to determine if the USTs are leaking. Leak detection tests include static testing. Static testing may be conducted by completely filling a UST and measuring for leakage by checking product levels at designated time intervals. Early detection of leaking fuel oil USTs will help to minimize costly and time consuming remediation.

Training

ASU employees involved in fuel oil delivery, storage and other aspects of fuel oil UST management must be familiar with this fact sheet, Spill Prevention, Control and Countermeasure Plan (SPCC) for ASU and UST regulations.

Reporting

Reporting requirements associated with fuel oil USTs involve ADEQ notification. ADEQ notification is required for the following:

- Placement of a tank into service;
- Change of service;
- Tank removal and/or abandonment;
- New and/or replacement UST and piping installations and modifications; and
- Release notification.

Recordkeeping

The owner of a fuel oil UST maintains all records associated with each repair or modification for the remaining operating life of the UST system. In addition, it is recommended that annual leak test results be

maintained in facility records along with an O&M log which maintains tank related operation and maintenance activity.

Impact

USTs represent a significant environmental risk. Prompt attention to operational requirements, especially the leak detection and response requirements, will minimize the potential high costs associated with the remediation of oil-contaminated soils and groundwater. Non-compliance with UST regulations can result in enforcement penalties of up to \$25,000 per day.

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