

Washoe County



Health District

STANDARD OPERATING PROCEDURES

REGULATED UST CLOSURE/REMOVAL POLICY

PROGRAM: Underground Storage Tanks (UST)

SOP No.: 05-UST-01 • Version No.: V2 • Effective: 01/03/13

Supersedes: May 4, 2005

Author:

1-3-13
Date

Michael L. Ezell
Michael L. Ezell, Senior Env. Health Specialist

Approved by:

1/3/2013
Date

Bob Sack
Bob Sack, Division Director
Environmental Health Services

POLICY STATEMENT:

Regulated Underground Storage Tank (UST) Closure/Removal Policy of the Washoe County Health District (WCHD).

SCOPE:

I UST Closure or Change of Service

A. Closure Through Removal:

Where required, permits must be obtained from the fire prevention agency and/or building department of jurisdiction prior to the initiation of underground storage tank (UST) closure through removal activities. It is the responsibility of the UST owner or owner's representative to make all notifications for inspection with these agencies in advance of UST closure through removal.

The Washoe County Health District (WCHD) does not currently issue permits for this activity. The WCHD must be notified 48 hours in advance of a UST removal and must be present for inspection during UST removal activities to ensure and verify that:

- 1) All UST removal activities are performed under the direct supervision of a Nevada Certified Tank Handler (CTH);
- 2) The UST has been emptied and cleaned of all accumulated liquids and sludge, and these materials are properly disposed;
- 3) UST vapor-spaces are properly rendered inert or purged and that accepted procedures are followed to protect human life and property from UST explosion;

REGULATED UST CLOSURE/REMOVAL POLICY

* * * * *

- 4) A visual inspection of tank and piping surface defects are documented;
- 5) An initial visual inspection of soils and/or groundwater is performed;
- 6) Accepted sampling protocols or methodologies are employed during site assessment activities; and
- 7) All site assessment activities are performed under the direct supervision of a Nevada Certified Environmental Manager (CEM).

B. Closure in Place:

Where required, permits must be obtained from the fire prevention agency and/or building department of jurisdiction prior to the initiation of UST closure in place activities. It is the responsibility of the UST owner or owner's representative to make all notifications for inspection with these agencies in advance of UST closure in place.

The WCHD does not currently issue permits for this activity. The WCHD *must be notified 48 hours in advance* of a UST closure in place. The WCHD *may* require inspection of the UST closure in place.

To permanently close a tank in place, owners or operators must empty and clean the tank of all liquids and accumulated sludge. The tank must then be completely filled with an inert solid material, such as thin concrete slurry. Before the UST closure in place the UST owner or operator must assess for the presence of a release of regulated substance where contamination is most likely to be present at the UST site, as defined by Nevada Administrative Code (NAC) 459.9972. *The WCHD must grant prior approval of the written site assessment work plan.*

C. Change in Service:

To conduct a UST change in service, UST owners or operators must remove the regulated petroleum substance from the UST, empty and clean the tank of all liquids and accumulated sludge and fill the tank with non-regulated or non-hazardous material. Before the UST change of service the UST owner or operator must assess for the presence of a release of regulated substance where contamination is most likely to be present at the UST site, as defined by the Nevada Administrative Code (NAC) 459.9972. *The WCHD must grant prior approval of the written site assessment work plan.*

II Environmental Sampling

Unless granted prior written approval by the WCHD, the following environmental sampling protocols will be required:

- A. One discrete soil sample will be obtained from:
 - 1) The native soil beneath each end of the UST, at a depth not greater than two feet and in areas where contamination is most likely to be present;
 - 2) The native soil at a depth not greater than two feet beneath each twenty lineal feet of petroleum product piping runs, or in locations where piping

REGULATED UST CLOSURE/REMOVAL POLICY

* * * * *

lengths are connected by couplings, elbows, wyes, tees or other plumbing fittings and where contamination is most likely to be present;

- 3) The native soil at a depth not greater than two feet beneath each dispenser pump/island;
- 4) Each 50 cubic yards of excavated soil stockpile. *Composite samples may be acceptable to characterize overburden soils in most circumstances.*

NOTE: The number of samples required may increase or decrease pursuant to site-specific conditions encountered.

B. Generally, if *visual or field screening evidence* of soil contamination is present, the sampled soil must be analyzed for the following chemicals:

- 1) Total Petroleum Hydrocarbons (TPH) using EPA Method 8015 Modified;
- 2) Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) using EPA Method 8260B – this requirement may be waived for site specific reasons such as the UST systems were known to have contained diesel fuel or heating oil.
- 3) Methyl Tertiary Butyl Ether (MTBE), EPA Method 8260B – this requirement may be waived for site specific reasons such as the UST systems were known to have contained diesel fuel or heating oil.
- 4) EPA Method 8270B for UST systems that were known to have contained diesel fuel or heating oil.
- 5) For UST systems that were known to contain heterogeneous mixtures such as used oil: TCLP extractions for Volatile Organics using EPA Method 8260B and for metals (Cd, Cr, Pb) using EPA Method 1311.
- 6) A 7/11 screen may be required if the owner is not certain of the type of material stored in the UST system. Seven metals: As, Ba, Cd, Cr, Pb, Se and Ag – using EPA Method 1311. Eleven volatile organic compounds: Benzene, Carbon Tetrachloride, Chlorobenzene, Chloroform, 1,4 Dichlorobenzene, 1,2-Dichloroethane, 1,1- Dichloroethylene, Methyl Ethyl Ketone, Tetrachloroethylene, Trichloroethylene, Vinyl Chloride – using EPA Method 8260B.
- 7) For site specific reasons, analysis for specific RCRA substances (e.g. PCBs, PCE, etc.) using EPA approved methods may be required.
- 8) If groundwater contamination is suspected, analysis for chemicals other than those listed above may be required.

C. In cases where there is no visual or field screening evidence of contamination, sampling for TPH using EPA Method 8015 Modified is the minimum analytical screen required.

NOTE: ANALYTICAL LABORATORIES MUST BE CERTIFIED BY THE STATE OF NEVADA TO PERFORM THE VARIOUS ANALYSES DESCRIBED ABOVE. CONTACT THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP) FOR A CURRENT LISTING OF CERTIFIED LABORATORIES.

REGULATED UST CLOSURE/REMOVAL POLICY

* * * * *

IV General Information

Any fill or native soils excavated to effect the UST removal must be sampled and analyzed for petroleum constituents as indicated above. If there is no visual or field screening evidence indicating that the soil is contaminated, the Certified Environmental Manager (CEM) may elect to use the soil at the sole risk of the UST owner/operator to backfill the excavation for safety or liability purposes. Soil with laboratory confirmed chemical concentrations at or above their respective action limits may not be used as backfill.

Clean excavated soil, suspected contaminated soil, well installation cuttings, excavated asphalt, concrete or other debris accumulated as a result of UST removal may not be stockpiled on site for more than thirty days. Soil or other debris suspected of being contaminated must be placed on an impervious material such as plastic sheeting, and contained in a manner that will prevent leaching contaminants from entering the ground or from entering surface drainage systems. Soil or other debris suspected of being contaminated must also be covered to reduce the emission of volatile organic compounds into the air and prevent the saturation of the material by atmospheric precipitation.

The WCHD requires a 24-hour prior notice for sampling inspections and sample location verification.

V Remediation of Petroleum Contaminated Soils

The WCHD must approve of the location and method of disposal or remediation for contaminated soil excavated in conjunction with UST closure operations. Where possible, obtain prior approval from the WCHD before the commencement of excavation activities. Soil treatment or disposal at local facilities is not required.

Locally, Nevada Thermal Services (NTS) and Waste Management Lockwood Regional Landfill (LRL) have been permitted by the State of Nevada for remediation or disposal of soils contaminated with specific categories or concentrations of contaminants. Both facilities have specific restrictions on the types and/or concentrations of contaminants within the soil. At a minimum, NTS and LRL require testing for TPH through EPA Method 8015 Modified. Either facility may also require other analyses and/or a waiver from the WCHD for halogenated organic testing. If a complete EPA Method 8260B analysis has been performed on the contaminated soils, the 8260B test results may be accepted by the treatment or disposal facilities in lieu of a waiver.

- Soils with TPH contamination of 600 mg/Kg or less may be disposed as standard waste at the LRL. Before soils can be delivered to the LRL as standard waste, a waste release(s) and trip ticket(s) must be obtained from the WCHD. Call the WCHD for requirements and current costs of waste release(s) and trip ticket(s).
- Soils with TPH contamination, including soils with concentrations in excess of 600 mg/Kg, may be treated at NTS. Before contaminated soils may be transported and accepted by NTS for treatment, a complete EPA method 8260B analysis must be performed or a waiver from the WCHD for halogenated organic testing must be obtained.

REGULATED UST CLOSURE/REMOVAL POLICY

* * * * *

- Soils with TPH contamination exceeding 600 mg/Kg may be accepted into the bioremediation cell at the LRL. Call LRL for testing and waste acceptance requirements.

VI UST Destruction

The WCHD must approve of the location and method of UST tank and piping destruction or disposal. Where possible, obtain prior approval of the WCHD before UST systems are removed from the ground. UST destruction or disposal at local facilities is not required.

Locally, UST system components may be disposed as standard waste at the LRL. Before the UST components will be accepted at the LRL, a waste release(s) and trip ticket(s) must be obtained from the WCHD. Call the WCHD for requirements and costs of waste release(s) and trip ticket(s). Prior to acceptance at the LRL the UST must be triple-rinsed and the rinse water disposed at an approved facility. Upon acceptance of the LRL, the UST must be crushed, cut into pieces or filled with an inert substance.

If the UST is to be transported, it must be transported according to the Nevada Department of Transportation (NDOT) and Nevada Highway Patrol rules or regulations.

VII Contacts

1. **Nevada Certified Tank Handler and Certified Environmental Managers**
Mr. Jeffrey Erwin, Nevada Division of Environmental Protection, Bureau of Corrective Actions, (775) 687-9379
2. **Nevada Petroleum Liability Fund**
Ms. Valerie King, Nevada Division of Environmental Protection, Bureau of Corrective Actions, (775) 687-9374
3. **Fire Prevention Bureau for Permit and Inspection Requirements**

Reno Fire Department	(775) 334-2300
Sparks Fire Department	(775) 353-2255
North Lake Tahoe Fire Prevention District	(775) 831-0351
Nevada Division of Forestry	(775) 684-2500
Truckee Meadows Fire Protection District	(775) 326-6000
4. **Building Departments Permit and Inspection Requirements**

City of Reno Community Development	(775) 334-2063
City of Sparks Building Department	(775) 353-2306
Washoe County Building Department	(775) 328-2020
5. **Other Relevant Contacts**

Nevada Thermal Services	(775) 342-0607
Waste Management - Lockwood Landfill	(775) 342-0401

REGULATED UST CLOSURE/REMOVAL POLICY

* * * * *

REFERENCES and or ATTACHMENTS:

Code of Federal Regulations (CFR) Title 40 Part 280;

Nevada Revised Statutes (NRS) 459.800 through 459.856 (Storage Tanks), Nevada Administrative Code (NAC) 459.9921 through 459.995;

NRS 459.500 through 459.535 (Consultant Certification), NAC 459.970 through 459.9729;

NRS 590.700 through 590.920 (Cleanup of Petroleum Discharges), NAC 590.700 through 590.790;

NRS 445A.010 through 445A.739 (Corrective Actions), NAC 445A (all).