

# UNDERGROUND STORAGE TANK SYSTEM AND SUMP CLOSURE REQUIREMENTS

*For use by Unidocs Member Agencies or where approved by your Local Jurisdiction  
Authority Cited: Title 23 California Code of Regulations, Chapter 16 (23 CCR);  
California Health and Safety Code, Chapter 6.7 (HSC); California Fire Code (CFC)*

## A. General Information

These requirements are applicable to permanent closure of hazardous material underground storage tank (UST) systems (i.e., tanks and piping), and sumps regulated per the Unidocs Guidelines for Adoption of California Underground Storage Tank Regulations (UN-001). All Unidocs documents are available at [www.unidocs.org](http://www.unidocs.org).

1. A *Permit for Removal* of UST systems or sumps will be issued upon approval of an Underground Storage Tank System Closure Permit Application (UN-003) by the local Unified Program Agency (UPA) having responsibility for the UST Program. The permit application form is available at [www.unidocs.org](http://www.unidocs.org).
2. Upon satisfactory review and approval of the closure permit application by the UPA, the owner of the UST system or sump shall carry out the proposed actions. Unless stated otherwise by the UPA, tank and sump removal activities shall be witnessed by a representative from the UPA. Closure inspections must be scheduled at least two (2) working days in advance.
3. Owners/Operators of tank systems or sumps undergoing closure may be required to possess the following numbers related to the management of hazardous wastes:
  - a. EPA Identification Number [Information available at [www.dtsc.ca.gov/IDManifest/index.cfm](http://www.dtsc.ca.gov/IDManifest/index.cfm)];
  - b. Hazardous Waste Generator Fee Account Number [Information available at [www.boe.ca.gov](http://www.boe.ca.gov)].
4. Contractors shall possess a current Contractor License (A, B, C-36, or C-61/D-40) and Hazardous Substance Removal Certificate issued by the Contractors State License Board (CSLB); Workers Compensation Insurance; and, if required by local municipal code, Business License. CSLB license and insurance status can be checked at [www.cslb.ca.gov](http://www.cslb.ca.gov).
5. The local Air Quality Management District may require submittal of an underground storage tank or treatment of contaminated soil notification form prior to removal of any tank containing organic material. District contact information is available at [www.arb.ca.gov/capcoa/roster.htm](http://www.arb.ca.gov/capcoa/roster.htm).
6. Underground Service Alert should be contacted at **(800) 227-2600** at least two working days prior to the start of excavation.
7. The contractor shall be responsible for ensuring that conditions at the site provide for workplace safety, protection of the environment, and maintenance of integrity of nearby structures.
8. Cal/OSHA requires that a site-specific Safety Plan be maintained on site during closure activities.
9. Backfilling of excavations shall be done in compliance with all Federal, State, and local requirements.
10. Wells shall be destroyed as required by Federal, State, and local requirements. A permit from the Santa Clara Valley Water District is required for well destruction. Well closure permit information is available at [www.scvwd.dst.ca.us/EkContent.aspx?id=354&terms=well+removal+permit](http://www.scvwd.dst.ca.us/EkContent.aspx?id=354&terms=well+removal+permit).
11. Check with other local agencies (e.g., Building and/or Public Works Departments) regarding requirements for additional permits (e.g., electrical, plumbing, excavation, compaction and grading, etc.) and any work impacting public streets, walkways, and rights-of-way.

12. The facility operator shall electronically submit a new or revised Hazardous Materials Business Plan (HMBP) at [cers.calepa.ca.gov](http://cers.calepa.ca.gov) or the local UPA's electronic reporting portal, if applicable.

## **B. Tank Removal**

1. Hazardous materials shall be removed from tanks and piping prior to tank system removal and must be properly managed. The Air Quality Management District requires that VOC residuals in tanks amount to less than 1/1,000 of the tank volume (i.e., less than 5 gallons VOC remaining in a 5,000 gallon tank). To achieve this, rinsing and/or tipping and pumping of the tank(s) may be necessary. Materials generated as the result of the rinsing or decontamination of tanks shall be managed as hazardous waste unless a written hazardous waste determination per 22 CCR §66262.11 demonstrates that the waste is non-hazardous.
2. All tanks and piping shall be manifested and hauled by a licensed hazardous waste transporter to a permitted hazardous waste facility, whether or not they have been rinsed on site, unless they have been cleaned on-site and certified as non-hazardous in accordance with California Code of Regulations, Title 22, Division 4.5, Chapter 32. *[Refer to the Unidocs Tank System On-Site Cleaning Requirements (UN-065) guidance document.]*
3. Tanks shall be removed from the excavation within 24 hours of removal of backfill and shall be transported off-site on the same calendar day they are removed from the ground or they may be required to be placed back into the excavation.
4. Tank removal or relocation may begin only after the local agency inspector has given approval.
5. All electrical service to tank(s)/pumps shall be terminated prior to start of excavation.
6. Dispensers/pumps and all associated piping shall be removed or capped if unable to be removed. [Note: Plumbing permits may be required.]
7. For tanks previously containing flammable/combustible materials, the tank closure contractor shall provide, on-site and readily accessible, at least one 40BC rated portable fire extinguisher and a calibrated meter capable of measuring LEL (Lower Explosive Limit) and oxygen levels.
8. Tanks previously containing flammable/combustible materials shall be made safe for removal from the excavation by the addition of dry ice (carbon dioxide) or other methods approved by the local agency sufficient to achieve an atmosphere of either less than 10% oxygen or less than 20% LEL.
9. All openings other than a pressure relief hole at the top of each tank to allow for venting shall be capped or plugged immediately after removal.
10. The closure contractor shall provide tank removal/lifting equipment of a size adequate to safely lift the tanks onto the transport vehicle without dragging them or otherwise causing an unsafe condition.
11. If an excavation is to remain open after the contractor leaves the site, the excavation perimeter shall be fenced 6 feet high or posted with a 24-hour guard.
12. Stockpiles of contaminated/suspect soil shall be stored on bermed plastic and covered. Contact the Local Oversight Program (LOP) and the Air Quality Management District regarding treatment and disposal of contaminated soil.

## **C. Soil and Groundwater Sampling**

1. Unless specifically stated otherwise in writing by the local UPA having responsibility for the UST Program, the collection of all samples required pursuant to 23 CCR §2672(d) must be witnessed by a

representative from the UPA. Sampling performed otherwise shall be considered invalid and must be repeated under UPA oversight at the UST owner/operator's expense.

2. Collection of samples shall occur during or immediately after tank closure activities. Soil samples shall be taken immediately beneath the removed portions of the tank system, a minimum of two feet into native material, in accordance with the following table:

*Sampling for Routine Petroleum or Solvent Tank Removals:*

<b>Water in Excavation?</b>	<b>Tank Size</b>	<b>Minimum # of Soil Samples</b>	<b>Location of Soil Samples</b>	<b>Minimum # of Water Samples</b>
<b>No</b>	≤10,000 gal.	2 per tank	One at each end of tank	None
<b>No.</b>	>10,000 gal.	3 or more per tank	Ends and middle or spaced along tank length	None
<b>Yes</b>	10,000 gal or less (single tank)	2	From wall next to tank ends at soil/groundwater interface	1
<b>Yes</b>	>10,000 gal. or tank cluster	4	From wall next to tank ends at soil/groundwater interface	1

3. Soil samples shall also be required under dispensers and every 20 linear feet along piping runs and as directed by the inspector overseeing closure. Where pipeline samples cannot be taken (e.g., under structures), pipeline pressure-testing shall be required to determine if leakage has occurred. Additional samples may be required.
4. Collection of samples shall done in accordance with the following Santa Clara County leaking underground storage tank Local Oversight Program (LOP) requirements:
  - a. Discrete, undisturbed soil samples shall be collected.
  - b. If the excavation cannot be entered, soil samples can be collected using a slide hammer with extensions. If that is not feasible, soil samples are generally collected from a backhoe bucket for safety reasons. If samples are collected from a backhoe bucket, the slough at the surface of the soil should be removed and relatively undisturbed soil should be chosen for sampling. A brass or stainless steel sleeve should be driven into the soil to collect the sample.
  - c. Samples shall be collected in brass or stainless steel sleeves. Samples containing volatile organic chemicals shall completely fill the sample container with no headspace. Sleeves are preferred when sampling for volatile organic chemicals. Samples containing volatile constituents must be collected at a minimum of 12 inches below the surface of stockpiles and excavations.
  - d. Soil sample sleeve ends shall be covered with Teflon sheeting, capped with plastic slip caps, taped, and labeled to identify location and depth. If it is necessary to collect sample in glass jars, they should be closed with a Teflon-lined lid, taped, and labeled to identify location and depth. Glass jars are not to be used for samples containing or suspected of containing volatile organic compounds.
  - e. Samples shall be placed immediately into a cooled container and maintained at 4°C until delivery to a California certified hazardous waste testing laboratory. Proper chain-of-custody procedures must be followed. The laboratory must state the condition of the samples upon receipt (e.g., chilled, seals intact).
  - f. The laboratory must receive samples within 24 hours of sampling and laboratory analysis must occur within the allowed holding time.

- g. Data generated by field instruments such as photo-ionization and flame-ionization detectors should be used for recording field conditions; however, they are not acceptable for quantifying contaminant concentrations.
5. Sample results without a properly completed chain-of-custody form shall be considered invalid and re-sampling will be required. The laboratory shall note, on the chain-of-custody or in the lab report, the status of evidence tape and condition of samples at time of sample receipt.
6. Soil and groundwater samples shall be analyzed as described in the Required Laboratory Analyses for Underground Storage Tank System Closure (UN-039) and applicable Regional Water Quality Control Board guidelines.
7. Samples shall not be composited by the laboratory and analyzed together.
8. If contamination of any detectable concentration is found, further soil and groundwater investigation may be required. At this point the site will be referred to the LOP and/or applicable Regional Water Quality Control Board ([www.waterboards.ca.gov](http://www.waterboards.ca.gov)) for oversight of remedial action.

#### **D. Sump Closure**

All relevant requirements for UST closure shall apply to sump closure activities. The following requirements are specific to sump closure:

1. All piping and sewer connections shall be removed where applicable. [Note: Plumbing permits may be required.]
2. Sumps shall be sampled to determine proper disposal method, or disposed of as hazardous waste based on generator knowledge of hazardous nature. Specific sample analyses required is dependent upon materials which were or might have been introduced into the sump structure.
3. Concrete shall be cored or jack hammered to permit collection of native soil samples from beneath the structure. Soil samples may be required from beneath any piping run.
4. Sumps may be either removed from the ground and disposed of in an approved manner, or crushed in place and backfilled subject to the approval of the inspector overseeing closure and in adherence to other applicable local requirements.

#### **E. Summary of Requirements to Obtain Final Tank System Closure**

1. Closure of any UST system for which a Unified Program UST Permit to Operate has been issued shall be electronically reported by the UST permit holder via the California Environmental Reporting System (CERS) at [cers.calepa.ca.gov](http://cers.calepa.ca.gov) or the local UPA's electronic reporting portal, if applicable. The permittee shall update and electronically submit the UST Operating Permit Application Facility Information and Tank Information data within 30 days of the date of closure. The reported date closed shall be the date the tank was removed from the ground or, if closed in-place, filled with an inert material.
2. The following information shall be submitted to the UPA overseeing closure within 60 days of tank removal: Analytical results from samples; sample Chain(s)-of-Custody; site drawings showing tank location(s), pipeline runs, sampling locations, and sampling depths; and a copy of the TSDF-signed copy of any Uniform Hazardous Waste Manifest or Consolidated Manifest used to transport tanks, piping, tank contents, and tank/piping rinseate.