

# UNDERGROUND STORAGE TANK SYSTEM AND SUMP CLOSURE GUIDELINES

*For use by Unidocs Member Agencies or where approved by your Local Jurisdiction  
Authority Cited: Title 23, Div. 3, Ch. 16 CCR; Ch. 6.7 HSC; California Fire Code*

## A. General Information

These guidelines are applicable to permanent closure of hazardous material underground storage tank systems (tanks and piping) and sumps regulated by all Unidocs Member Agencies per the Guidelines for Adoption of California Underground Storage Tank Regulations.

1. A *Permit for Removal* of underground tank systems or sumps will be issued upon approval by the local agency of an Underground Storage Tank System Closure Permit Application (available at [www.unidocs.org](http://www.unidocs.org)).
2. Upon satisfactory review and approval of the closure permit application, the owner of the hazardous materials storage tank or sump shall carry out the proposed actions. Tank and sump removal and sampling activities must be witnessed by a representative from the local agency. Closure inspections must be scheduled at least 48 hours in advance.
3. Owners/Operators of tank systems or sumps undergoing closure may be required to possess the following:
  - a. A hazardous waste EPA Identification Number.  
Temporary ID numbers can be obtained at (800) 618-6942.
  - b. A 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, C-61/D-40), and Hazardous Substance Removal Certificate issued by the Contractors State License Board (CSLB), Workers Compensation Insurance, and - if required by the local jurisdiction - Business License. Contractor 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 **1-800-227-2600** 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 Health and Safety Plan be maintained on site during closure activities.
9. Soil/groundwater samples shall be analyzed by a laboratory state-certified for the required analyses and handled under a chain-of-custody form. Sample results without a chain-of-custody form shall be considered invalid and re-sampling will be required.
10. When groundwater is encountered, groundwater samples shall be required as described in the Recommended Minimum Verification Analyses for Underground Tank Leaks (available at [www.unidocs.org](http://www.unidocs.org)) and applicable Regional Water Quality Control Board guidelines.

11. 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 appropriate leaking underground storage tank Local Oversight Program (LOP) and/or applicable Regional Water Quality Control Board ([www.waterboards.ca.gov](http://www.waterboards.ca.gov)) for oversight of remedial action.
12. Backfilling of excavations shall be done in compliance with all Federal, State, and local requirements.
13. Monitoring and cathodic protection wells shall be destroyed as required by Federal, State, and local requirements. A permit may be required for well destruction.
14. Check with 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.
15. The tank owner or facility operator shall submit a new or revised Hazardous Materials Business Plan, if appropriate. Forms are available at [www.unidocs.org](http://www.unidocs.org).
16. Owners of hazardous materials storage tanks shall submit the following completed Unified Program Consolidated Forms (UPCF) to the local agency along with the Closure Permit Application/Closure Plan: UPCF Facility Information - Business Activities; UPCF Facility Information - Business Owner/Operator Identification; UPCF Underground Storage Tank - Facility (for site); and UPCF Underground Storage Tank - Tank (separate form for each tank). Forms are available at [www.unidocs.org](http://www.unidocs.org).

## **B. Tank Removal**

1. Hazardous materials shall be removed from tanks and piping prior to tank removal and must be properly managed. Air Quality Management Districts require 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 manifested as hazardous wastes.
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 cleaned and certified in accordance with California Code of Regulations, Title 22, Division 4.5, Chapter 32 (refer to the Unidocs Hazardous Materials Storage Tank System Cleaning/Cutting Guidelines, available at [www.unidocs.org](http://www.unidocs.org), for details).
3. Tanks shall be removed from the excavation within 24 hours of removal of backfill.
4. Tank removal or relocation may commence only after the local agency inspector has given approval.
5. All tanks shall be transported from the site on the same calendar day as they are removed from the ground or they may be required to be placed back into the excavation.
6. All electrical service to tank(s)/pumps shall be terminated prior to start of excavation.
7. Dispensers/pumps and all associated piping shall be removed or capped if unable to be removed. (Note: Plumbing permits may be required.)
8. For tanks previously containing flammable/combustible materials, the licensed 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.

9. 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.
10. 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.
11. The tank closure contractor shall provide tank removal/lifting equipment of a size adequate to safely remove tanks.
12. If an excavation is to remain open after the contractor leaves the site, the excavation perimeter shall be fenced 6' high or posted with a 24-hour guard.
13. All stockpiles of contaminated/suspect soil shall be stored on bermed plastic and covered. Contact the Local Oversight Program (if applicable) and the Air Quality Management District regarding treatment and disposal of contaminated soil.

**C. Soil and Groundwater Sampling**

1. Location and manner of sampling and analyses shall be in accordance with Regional Water Quality Control Board Guidelines and as directed by the field inspector.

*Sampling for Routine Petroleum or Solvent Tank Removals:*

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

2. Soil samples shall be required under dispensers and every 20 linear feet along piping runs and as directed by the inspector overseeing closure. Where pipeline samples can not be taken (e.g., under structures), pipeline pressure-testing shall be required to determine if leakage has occurred. Additional samples may be required.
3. All samples shall be immediately transported in a chest on ice to the laboratory for analysis.
4. Samples shall not be composited by the laboratory and analyzed together.

## D. Sump Closure

All relevant requirements for underground storage tank closure shall apply to sump closure activities. The following are requirements 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

The following information shall be submitted to the local agency overseeing closure within 60 days of tank removal:

➤ Two copies of...

- Analytical results from samples
  - Sample Chain(s)-of-Custody
  - Site drawings showing tank location(s), pipeline runs, sampling locations, and sampling depths
  - Other (if required by local agency, e.g., backfill compaction report etc.): \_\_\_\_\_
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➤ One photocopy of the TSDF-signed copy of each hazardous waste manifest used to transport the following items:

- Tanks/Piping
- Rinseate

➤ Laboratory shall note, on chain-of-custody or lab report, status of evidence tape and condition of samples at time of sample receipt.