



County of Riverside  
**DEPARTMENT OF ENVIRONMENTAL HEALTH**

P.O. BOX 7909 • RIVERSIDE, CA 92513-7909

JEFF JOHNSON, DIRECTOR

## **HAZARDOUS MATERIALS MANAGEMENT BRANCH**

### **UNDERGROUND STORAGE TANK GUIDELINES TO CLOSURE BY REMOVAL**

NOTE: This Branch strongly urges applicants to contact the local fire department jurisdiction prior to the removal of any Underground Storage Tank (UST) as local fire restrictions may be more stringent.

#### **A. General Information**

1. A completed permit application, including a work plan and payment of associated fees must be submitted to the Branch for approval prior to starting work.
2. The State Contractors License Board requires contractors who install or remove USTs and piping to have the Hazardous Substance Certification and one of the following licenses: General Engineering "A"; Limited Specialty C-61/D-40 for UST's and pipelines; Pipeline Contractor C-34 for pipelines only; or General Building "B" (limited).
3. It is the responsibility of the UST owner or duly authorized representative, to notify other governmental agencies that may have applicable permit requirements. This includes, but is not limited to, the following: local fire agency; local building department; and Air Quality Management District (AQMD). Notification shall always be given for any work impacting public streets, walkways, and/or rights-of-way.
4. Between cessation of use/storage and the actual closure, monitoring shall be continued as required by the operating permit.
5. The Permittee shall be responsible for ensuring that conditions at the site provide for workplace safety, protection of the environment, and the integrity of nearby structures. Cal/OSHA may require a site-specific safety plan be maintained onsite.
6. The Permittee shall provide site security to prevent unauthorized access into work zones.. Underground Service Alert should be contacted at 811 or (800) 422-4133 at least two working days prior to the start of excavation.
7. The 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). The permittee shall update and electronically submit the UST Operating Permit Application Facility Information and Tank Information date 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, the date filled with inert material.

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**(888)722-4234 • [rivcoeh.org](http://rivcoeh.org)**

## B. Closure Requirements

1. A completed UST closure application and **4 sets of plans or an electronic version of the plans shall be submitted to this department.** A closure permit is valid for ninety (90) days and will be issued upon satisfactory review and approval by the Branch. If closure is not completed within ninety (90) days, the closure permit shall expire.
2. A UST closure inspection must be scheduled with the Branch five (5) working days in advance of proposed closure date by e-mailing [USTnotifications@rivco.org](mailto:USTnotifications@rivco.org).
3. All liquids, solids, and sludge shall be removed and handled according to the provisions of Chapter 6.5, Division 20 of the Health and Safety Code and Title 22, Chapter 32, Section 67383.1 of the California Code of Regulations. The UST shall be properly cleaned, which usually requires the pressure washing/rinsing of the UST and removal of the contents via a vacuum type pump system that is designed to safely handle flammable liquids. The Branch can provide a list of licensed hazardous waste haulers/tank rinsing companies.
4. Flammable vapors must be purged from the UST and the UST shall be inert to prevent an explosion or fire. The Branch must verify Lower Explosive Limit (LEL) is < 10% prior to the inerting of the UST with 22.2 lbs. of dry ice per 1,000 gallons of UST capacity. The UST must then promptly be removed and transported to its final destination accompanied by the UST Closure Certification Form. The local fire and AQMD regulations may be more restrictive.
5. All LEL readings shall be taken with a Combustible Gas Indicator (CGI) that has been properly calibrated. The readings shall be taken at the top, center, and bottom of the tank before the tank is loaded onto the transport vehicle. The contractor shall demonstrate to the satisfaction of the Branch how to properly use the calibrated meter, including applicable conversion factors, and shall have the appropriate conversion factors readily available for review upon request by the Branch.
6. All associated piping must be removed. Product or residue spillage must be prevented.
7. Proper UST disposal documentation, in accordance with the requirements of Chapter 6.5, Division 20 of the Health and Safety Code, shall be provided to the Branch.
8. Applicant must demonstrate to the satisfaction of the Branch whether an unauthorized release has occurred or not in accordance with CCR section 2651(d). Demonstration will be based upon results of sensory observations, monitoring equipment readings, and soil/water samples obtained during UST closure activities. All sampling activities are to be performed by the permittee or designated representative.
9. The sample analysis must be performed by a California state certified laboratory. The sample analysis, along with the Branch Sample Receipt form and a chain of custody must be received by the Branch within thirty (30) days.
10. Soil samples shall be taken below the UST/piping system at the time of UST removal. At a minimum, samples are required 2' (feet) into native material at each end of the tank with a recommended additional sample 6' (feet) into native material below the fill end of the tank. Additionally, separate samples for each 20 lineal feet of piping and at each dispenser shall be taken. (It is strongly recommended that 6' samples be taken at each piping and dispenser sampling location.) Branch personnel may require additional sampling.

11. The soil samples shall be analyzed for all constituents of the previously stored hazardous substances and their breakdown constituents or transformation products according to the Table titled “Laboratory Analysis for Samples Collected at UST Sites”.
12. Permittee shall provide the Branch with an unaltered copy of laboratory analysis, including QC package, from the chosen state certified laboratory for review.

**C. Work Plan Guidelines**

1. A work plan must be submitted (with permit application) to the Branch prior to UST removal.
2. The work plan should include the following information:
  - A. Site Description: the physical address along with a site plot plan.
  - B. On-Site Security: indicate who will be on site (what agencies, contractors, etc.), and how site security will be maintained.
  - C. Contacts: Indicate the responsible party’s name and phone number, contractor’s name and phone number.
  - D. Treatment of USTs prior to removal indicate the following:
    - 1) How the USTs will be cleaned. Indicate name and credential of certified UST cleaner, as well as final destination of rinsate.
    - 2) How you will inert the UST. Indicate the quantity of dry ice to be used, and that it will not be placed into the UST until the Branch representative is on site.
    - 3) If the USTs are to be saw cut. If so, this needs to be detailed.
    - 4) Destination of UST—indicate where the USTs are going and how they will be transported. All openings in the UST shall be plugged, except for a 1/8” inch vent hole.
    - 5) CGI and other air/vapor monitoring —type of monitoring equipment to be used and date of last calibration.
  - E. Depth to groundwater: region specific. If tank is in ground water, indicate safety precautions that will be taken.
  - F. Equipment to be used on site:
    - 1) Heavy equipment: indicate the type of equipment to be used to physically remove the USTs from the excavation. Ensure the equipment is rated to handle the weight of the UST.
    - 2) Sampling: indicate the type of equipment to be used to gather the soil/water samples. Ensure equipment is able to reach at least 6’ into native material below the bottom of the UST, piping, and dispensers. Indicate the type of container that will be used to hold the samples. Demonstrate how contamination of samples is to be avoided. Provide the name of the California certified lab that will be analyzing the samples. Indicate when the samples will be analyzed and how you will hold the samples in the interim. Ensure a chain of custody accompanies the samples to the lab.
  - G. Excavation status: indicate the disposition of the excavation upon removal of the tank (i.e. open and fenced, backfilled with new and excavated soil, etc.)

- H. Safety—indicate the following:
- 1) The type of personal protective equipment to be required for all persons on site.
  - 2) The safety items that will be available on site (fire extinguisher, first aid, etc.).
  - 3) The nearest emergency medical facility to be used in the event of an accident or emergency.
  - 4) That all tools to be used to clean the exterior of the tank will be non-sparking. Give examples and be specific.
  - 5) Whether shoring is necessary/required.
  - 6) The person who will be responsible for safety (Safety Officer).
  - 7) The presence of any overhead hazards (electrical lines, etc.). Indicate how the hazard will be addressed/mitigated.
  - 8) The presence of any underground hazards (gas pipes, sewer lines, water mains, etc.) and how the hazard will be addressed/mitigated.

**NOTE: THIS DOCUMENT IS FOR GUIDANCE ONLY AND IS NOT INTENDED TO SUPERSEDE ANY SAFETY OR OTHER LEGAL REQUIREMENTS. OWNER / CONTRACTOR RETAINS ALL RESPONSIBILITY ASSOCIATED WITH ACTIVITIES SURROUNDING THE SAFE AND LEGAL REMOVAL OF THE TANK(S).**