



CITY OF
SANTA ROSA

Fire Department

955 Sonoma Avenue
Santa Rosa, CA 95404
Phone: (707) 543-3500
Fax: (707) 543-3520

<http://ci.santa-rosa.ca.us/fd/>

**FIRE DEPARTMENT
INFORMATION BULLETIN**

SUBJECT: UNDERGROUND STORAGE TANK (UST) CLOSURE AND REMOVAL

Bulletin Number: 011

Date of Issue: June 6, 1994

Code Reference:

1994 Uniform Fire Code (UFC), Articles 79 & 80

Santa Rosa City Code (SRCC), Chapters 18-16 & 18-44

California Code of Regulations, Title 23

40 Code of Federal Regulations (CFR), Chapter 280

NOTE: This bulletin is a summary of Fire Department interpretations of City, State and Federal Codes. Information contained herein applies to typical instances and may not address all circumstances. This bulletin is not intended to address retail storage and/or sales of hazardous materials.

DEFINITIONS:

HAZARDOUS WASTE

All underground tanks and any associated piping which previously was used to store or dispense motor vehicle fuel or other hazardous material, including waste oil, shall be handled as hazardous waste, unless the system has been properly treated and rendered non-hazardous.

TANK ABANDONMENT

Tanks taken out-of-service for more than 90 days and which have not been permitted for temporary closure shall be considered abandoned. Upon locating an abandoned tank, the tank owner shall have 30 days to properly remove the tank.

UNDERGROUND STORAGE TANK (UST)

An underground storage tanks is any tank, vault, clarifier, hoist, etc., including piping connected thereto which is, or has been used for the storage of any hazardous material and which is beneath the surface of the ground.

**INFORMATION BULLETIN
UNDERGROUND STORAGE TANK (UST)
CLOSURE AND REMOVAL**

PERMIT REQUIREMENTS:

TEMPORARY CLOSURE PERMIT

A permit shall be obtained when a tank is placed out-of-service, but intended to be returned to use within 12 months.

CLOSURE/REMOVAL PERMIT*

A permit shall be required to close or remove any underground tank or piping system.

REMEDICATION PERMIT*

A remediation permit shall be required for over excavation of the UST removal, or other excavation and removal of subsurface contamination. Over excavation shall be considered as an excavation extending greater than 5 feet from the previous tank location. A separate permit shall also be required for the installation of any on-site soil or groundwater treatment system.

ADDITIONAL PERMITS

Additional permits may also be required by the Building Department for back filling the excavation, by the County Environmental Health Department for well installations, by OSHA for shoring of the excavation, and/or by the Bay Area Air Quality Management District (BAAQMD) for air stripping of soil. Contact the respective offices for additional information and specific requirements.

** All work performed on any underground tank system must be conducted by a contractor with a current State Contractor's License (A, C-36, C-61/D40) and Hazardous Waste Certification, Workman's Compensation Insurance and a City of Santa Rosa Business License.*

GENERAL REQUIREMENTS:

All plans involving underground tank closures and removals must be submitted to the Fire Department for review and approval. To obtain a permit, the tank owner, operator or authorized representative of the tank owner shall submit the following information:

- 1) A Hazardous Materials Permit Application and fees. The permit application must be submitted at least ten (10) days prior to the anticipated removal date.

**INFORMATION BULLETIN
UNDERGROUND STORAGE TANK (UST)
CLOSURE AND REMOVAL**

- 2) Two (2) sets of plans which identify the following information:
 - a. Assessor's Parcel Number and property owner.
 - b. Location of the site with respect to the street, property lines, and buildings.
 - c. Outline of the proposed excavation, tanks and piping.
 - d. Location of underground utilities or other obstacles within 10 feet of the excavation.
- 3) A UST Removal Application along with the State UST Registrations Forms "A" and "B".
- 4) Contractor's site safety plan, work plan and licenses.
- 5) If the tank is not to be transported and disposed of as hazardous waste, a copy of the contractor's tank cleaning procedures shall be submitted, in accordance with the "Tank Cleaning Guidelines" outlined below.

Note: Within thirty (30) days of the tank closure or removal, all soil analyses results must be submitted along with a copy of the waste disposal manifests and tank disposition.

TEMPORARY CLOSURE

A permit shall be obtained whenever a tank is placed out-of-service, but intended to be returned to use within 12 months. Temporary closure of tanks shall be conducted in accordance with UFC Article 79 and CCR Title 23, Chapter 16, Section 2671.

TANKS CLOSED-IN-PLACE

UST's shall not be permitted to be closed-in-place unless a report is submitted by a qualified engineer certifying that removal of the tank would structurally weaken or endanger an adjacent building, or as otherwise approved by the Chief. Tanks which have been permitted to be closed-in-place shall be closed in accordance with UFC Article 79 and CCR Title 23, Chapter 16, Section 2672(c).

TANK REMOVAL

Tank removals shall be conducted in accordance with UFC Article 79 and CCR Title 23, Chapter 16, Section 2672 and the following conditions:

- 1) The removal contractor shall contact the Fire Department at least 48 hours in advance to schedule the tank removal inspection.
- 2) The site shall be safeguarded to prevent any unauthorized access.

**INFORMATION BULLETIN
UNDERGROUND STORAGE TANK (UST)
CLOSURE AND REMOVAL**

- 3) All tanks and piping shall be rendered free of product and the piping disconnected from the tank using approved non-sparking tools, in a manner allowing the tank openings to be sealed. All residual product, solids or sludges must be handled as hazardous waste.
- 4) If the tank previously contained a flammable or combustible material, the tank shall be inerted using 15 to 30 pounds of dry ice per 1,000 gallons tank capacity.
- 5) When the Fire Department inspector has verified that the atmosphere in the tank is less than 20% of the Lower Explosive Limit (LEL) the tank may be removed from the excavation.
- 6) If the excavation uncovers a previously unknown tank, the operator shall cease operations and immediately contact the Fire Department. An additional/revised permit must be obtained prior to commencement of activities.
- 7) The tank and all associated piping must be removed and disposed of at the time of removal.
- 8) The tanks and piping shall be transported, manifested and disposed of as hazardous waste unless it has been rendered non-hazardous in accordance with the "Tank Cleaning Procedures" outlined below.

TANK CLEANING GUIDELINES

Tanks or piping which are not to be transported and disposed of as hazardous waste shall be cleaned in accordance with nationally recognized standards. A copy of the contractor's tank cleaning procedures must be submitted, which addresses, at a minimum, the following requirements:

- 1) The tank and piping shall be completely emptied of all product, solids and sludge.
- 2) If the tank contained a flammable or combustible liquid, the tank must be ventilated, using a venturi type blower for at least 30 minutes.
- 3) To facilitate cleaning, a 2' X 2' hole may be cut into or near the top of the tank utilizing non-sparking intrinsically safe equipment. However, if the tank is to be entered, a confined space entry plan must be submitted by the contractor.
- 4) The tank and piping shall be pressure rinsed not less than three times with the final rinse conducted using tri-sodium phosphate (TSP), or equivalent. All rinseate shall be removed and disposed of as hazardous waste. A copy of the disposal manifest must be submitted within 30 days of the tank removal.

**INFORMATION BULLETIN
UNDERGROUND STORAGE TANK (UST)
CLOSURE AND REMOVAL**

- 5) A certification must be submitted by one of the following qualified persons, stating that the cleaned tank is no longer a hazardous waste:
- a. Certified Industrial Hygienist
 - b. Certified Safety Professional
 - c. Certified Marine Chemist
 - d. A technician working under their direct supervision of one of the aforementioned certified individuals.

The certification shall be accompanied by an inspection report verifying that all visible deposits, sludge or other foreign matter have been removed from the tank; that there is no discernable odor present; and that the final rinseate from the tank cleaning did not include any visible sheen.

- 6) The Fire Department Inspector shall visually inspect the tank and piping to verify that all product, sludge and rinseate has been removed, and verify that the LEL is not greater than zero (0). If greater than 0, Steps 1 through 5 shall be repeated.
- 7) The tank shall be removed in accordance with the Tank Removal Guidelines outlined in the previous section.
- 8) Prior to transportation, each side of the tank shall be stenciled with the following warning in 2" block letters:

WARNING

**This tank has contained flammable or hazardous materials.
Not suitable for drinking water.**

- 9) The disposition of the tank shall be at a location approved by the Fire Department.

SAMPLING AND REPORTING REQUIREMENTS

Soil samples shall be collected in the presence of a Fire Inspector in accordance with the Regional Water Quality Control Boards Fuel Leak Guidelines. Generally, one (1) sample is required for tanks under 1,000 gallons and two (2) samples are required for tanks of 1,000 gallons or more. In addition, samples shall be collected along every 20 lineal feet of piping, or change in direction, and at least one (1) sample from under each dispenser. If it is not possible to obtain a soil sample from below the tanks or piping due to the presence of groundwater, side-wall samples may be obtained at the high water level, along with a groundwater sample, and

**INFORMATION BULLETIN
UNDERGROUND STORAGE TANK (UST)
CLOSURE AND REMOVAL**

shall be analyzed in accordance with the RWQCB Fuel Leak Guidelines. Additional samples may also be required by the Fire Department of the spoils/backfill, or as determined by the Inspector in the field.

Samples shall be submitted for analysis to a California Certified Hazardous Waste Testing Laboratory. Results of the analyses shall be submitted to the Fire Department within 30 days of the tank closure/removal.

CLEAN-UP AND REMEDIATION REQUIREMENTS

The Fire Department assumes responsibility for oversight of all clean-up and/or treatment of contaminated soils. For information concerning clean-up responsibilities and requirements for contaminated groundwater, or for information concerning the State UST Cleanup Funds provided by Senate Bill 2004, contact the California Regional Water Quality Control Board - North Coast Region at:

5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
(707) 576-2220

Although the RWQCB is the responsible agency for groundwater remediation, the Fire Department requires a copy of all status reports, and may require additional plans or permits for the installation of remediation equipment.