



City of Anaheim
Fire Department
Fire Prevention Bureau



Specifications and Requirements

Subject: UNDERGROUND STORAGE TANK REMOVAL GUIDELINES

References: California Fire Code, 2007 Edition; California Health & Safety Code, Chapter 6.7; California Code of Regulations, Title 23, Division 3, Chapter 16

A permit must be obtained from the Anaheim Fire Department prior to the start of underground storage tank (UST) removal activities, and be maintained on site at all times with a copy of the approved removal plans. Failure to obtain a permit or abide by these guidelines may result in the issuance of a citation. The Public Works and Planning Departments must acknowledge review of the plans for the project prior to permit issuance.

Obtaining a Permit

To obtain a permit, submit the following to the Anaheim Fire Department, Hazardous Materials Section, located at 201 S. Anaheim Blvd., #300, Anaheim, CA 92805:

1. Facility Closure Plan (if applicable)
2. City Building Division Permits (if applicable)
3. Copy of current City Business License
4. Copy of Workers' Compensation Coverage
5. Copy of California Contractor's License (A, B, C-36, D-40 only)
6. Copy of Hazardous Substance Removal Certification
7. Completed Permit Application
8. Three (3) sets of plans which include: tank(s) size, current and past contents, location of tank(s) and piping, utilities, structures, property lines and streets
9. Appropriate Permit Fee
10. Statement indicating whether UST(s) will be transported as hazardous or non-hazardous waste
11. UPCF UST Facility Information and Tank Information forms
12. A statement from the property owner indicating the intended disposition of the property once the tanks have been removed (i.e., reinstallation, sale of property)

THE UST REMOVAL PERMIT IS VALID FOR ONE (1) YEAR.

UST Removal as Hazardous or Non-Hazardous Waste

1. HAZARDOUS WASTE

Tanks to be removed and transported as hazardous waste must be dry iced at a ratio of not less than 10 pounds per 1,000 gallons of tank capacity. A tank may not be lifted from the excavation until it has been demonstrated to the Fire Department representative that the atmosphere in the tank is less than 10% LEL or 5% oxygen. The Uniform Hazardous Waste Manifest(s) must be used for all tanks and/or piping disposed of as hazardous waste.

2. NON-HAZARDOUS WASTE

Tanks and piping to be removed and transported as non-hazardous waste must be triple-rinsed and certified by a registered Marine Chemist or Industrial Hygienist. Tanks may not be lifted from the excavation until a copy of the certification for each tank and associated piping is presented to a representative of the Fire Department.

Underground Storage Tank Removal Procedures

Upon issuance of the permit, notify this department **48 hours prior** to starting the project. A representative of this department may visit, or remain, on the site(s) to verify compliance with these guidelines. A properly calibrated and serviced Combustible Gas Indicator must be provided for determining LEL and/or oxygen concentrations.

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The site must be secured to prevent pedestrian and vehicular access and “NO SMOKING” signs shall be posted. Appropriate size and number of fire extinguishers shall be on site at all times.

1. If the amount of remaining materials in the tank(s) exceeds 60 gallons and is a Class I or II liquid (gasoline and diesel), a flammable/content permit must be obtained. Notify this department 48 hours in advance to schedule the flammable/content removal inspection. Remove as much material from the tank(s) as possible and dispose of properly.
2. Purge all piping of hazardous materials and vapors. Accomplish this by flushing a sufficient quantity of water through all piping back into the tank(s).
3. The ground surface covering may then be cut and removed. Excavation to expose the tank(s) and piping may begin, being careful not to puncture the tank(s) or cause a spark. Only the top surface of the tank(s) may be uncovered at this point. Disconnect, but leave in place, all piping in their trenches. Equipment and supplies shall be readily available to control any vapor emissions, such as bulldozer, back hoe, skip loader, heavy plastics, etc.
4. Access the tank(s) through existing openings. Do not cut any new, or expand existing, openings without prior approval from a registered Marine Chemist or registered Industrial Hygienist. Only cold cutting on top of tanks with an atmosphere of less than 10% LEL or 5% oxygen in the top third of the tank will be approved.
5. If tank(s) are to be removed as non-hazardous waste, begin degassing, if required, according to SCAQMD (909-396-2000) regulations. Begin cleaning the tank(s), and properly collect waste rinse material for disposal. Continue degassing as necessary. After achieving the acceptable SCAQMD permit level and demonstrating an acceptable level (see #6) to the Fire Department representative, holes may be cut on the top of the tank. After cleaning and triple rinsing is completed, the tank(s) shall be inspected, certified and marked by a registered Marine Chemist or registered Industrial Hygienist. An official signed certificate must be shown to the Fire Department representative prior to further excavating around the tank(s). Uniform Hazardous Waste Manifest(s) must be completed and shown to the Fire Department representative prior to the rinse waste leaving the site.
6. If tank(s) are to be removed as hazardous waste, remove as much liquid from the tank(s) as possible. Add a minimum of 10 pounds of dry ice per 1,000 gallons tank capacity for each tank. Allow adequate time for the dry ice to displace the oxygen in the tank(s). An atmosphere of less than 5% oxygen shall be achieved and demonstrated to the Fire Department representative prior to further excavating around the tank(s).
7. Upon completion of the excavation, the Fire Department representative shall give the approval for the removal of the tank(s). An additional % LEL or % oxygen reading may be necessary at this time. If the tank(s) are being disposed as Hazardous Waste, an additional oxygen concentration reading in the tank(s) is required to verify that it is below 5%. Any tank above this 5% shall not be removed and will require additional dry ice.
8. A crane is required for removal of all tanks above 550 gallon capacity. After lifting a tank from the excavation, the Fire Department representative will inspect if for evidence of a release and determine the overall condition. Upon completion of this evaluation, the tank must go directly to an approved transportation vehicle and be properly secured.
9. All piping and electrical wiring associated with the tank(s) shall be removed and disposed of properly, unless removal might compromise the integrity of a structure. Abandonment-in-place of any piping or wiring requires prior approval from this department. Upon approval, piping shall be purged, filled and capped.
10. Soil and/or ground water samples shall be taken after removal of the tank(s), but before the piping is removed. Soil samples may only be collected in brass or stainless steel cylinders with caps, Teflon and labels. A sealable cooler, with a cooling material, must be on site prior to the start of any sampling. The Fire Department representative will direct all soil and/or water sampling. At a minimum, samples shall be taken under each dispenser, every 20 feet of product piping (so as to include fittings) and ends of each tank. Stock pile samples of soil at roughly every 25 cubic yards are also required.

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11. The “Chain of Custody” will be prepared by the Fire Department representative and shall accompany the samples to a State Certified Laboratory for testing. The analyses to be conducted, as indicated on the Chain of Custody, are dictated by the State Water Resources Control Board’s approved methods for each substance that was previously stored in the tank(s). Laboratory analyses must occur within the allowable holding period. The official written report of the analytical results and the completed **white copy** of the “Chain of Custody” must be sent directly from the laboratory to the Anaheim Fire Department within **thirty (30) days** of the sampling date.

Laboratory Testing of Samples Taken

All soil and water samples taken as part of a tank removal project must be analyzed for the hazardous material(s) and certain ingredients present in the tank over the life of the tank by a laboratory that is state certified for all of the EPA approved test methods used. The Anaheim Fire Department does not specify which test methods to be used on each sample, only the chemical(s) to be analyzed for.

Also, if the TRPH on a used oil sample is greater than 1,000 ppm, then EPA method 8260 must be used for MTBE, BTXE and chlorinated solvents.

Closure/Completion Letter

Upon satisfactory completion of the above activities and the receipt of the eight items listed below, a letter will be issued to the UST(s) owner(s) stating that the project has been completed to the extent of the Anaheim Fire Department’s jurisdiction. However, this does not include any cleanup activities that may be required by the Anaheim Public Utilities Department, Environmental Services.

The following items shall be submitted to the Anaheim Fire Department within **thirty (30) days** of the conclusion of sampling:

1. White copy of Chain of Custody
2. Laboratory results for all samples tested
3. Destruction Certificate for all tanks and piping
4. Photocopy of all Uniform Hazardous Waste Manifests as left site
5. Photocopy of all Uniform Hazardous Waste Manifests signed by the TSDF
6. Marine Chemist/Industrial Hygienist Certificate
7. Unauthorized Release Report (URR)
8. SCAQMD Monitoring Records

For further information regarding these requirements contact: Hazardous Materials Section at (714) 765-4040 between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.