



City of Anaheim
Fire Department
Fire Prevention Bureau



Specifications and Requirements

Subject: UNDERGROUND STORAGE TANK INSTALLATION AND MODIFICATION GUIDELINES

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

This Specification and Requirement is intended to provide guidance for underground storage tank (UST) installations, modifications and repairs. Note, this document is provided as a general guideline and is not intended to be all-inclusive. Please refer to the appropriate laws and regulations for additional information.

Obtaining a Permit

A permit to install or modify (includes repair) a UST must be obtained from this department prior to start of work. Failure to obtain a permit may result in the issuance of a citation. In order to obtain a permit for the installation or modification of a UST system the following information must be submitted to the Anaheim Fire Department, Hazardous Materials Section located at: 201 S. Anaheim Blvd., #300, Anaheim, CA, 92805.

1. Three complete sets of project plans (detailed site map with respective cut sheets, scope of work, and complete equipment list with model numbers)
2. Proof of current City of Anaheim Business License
3. Copy of Workers' Compensation Insurance
4. Copy of State Contractor's License (C-36, C-61, D-40, General A or B)
5. Copy of State Hazardous Substance Removal Certificate
6. Copy of documentation of qualification
7. Completion of the following forms:
 - UPCF Business Activities
 - UPCF UST Tank Information
 - UPCF UST Facility Information
 - UPCF UST Certificate of Installation/Modification
8. Permit Application
9. Payment of appropriate fees

The Public Works and Planning Departments must acknowledge review of the plans for the project prior to permit issuance. All permit applications, plans and associated documents submitted will be evaluated for compliance with all applicable codes, statutes, regulations and this guideline. If they are deemed unsatisfactory, they will be returned to the applicant with a Correction Notice identifying the observed deficiencies. If the plans are resubmitted and returned for corrections more than twice, the full cost of plan check will be reassessed on the applicant. Once the application and plans have been approved, a permit and job card will be issued. The permit, job card and one set of approved plans are required to be present at the job site while work is being performed.

Required Inspections

A City of Anaheim Fire Department representative must be on-site for all inspections listed below. Inspections should be scheduled at least 48 hours (of business days) in advance.

- Pre-installation tank test before tank placement [steel: holiday; fiberglass: five (5) psi of air pressure for one (1) hour and complete soaping or vacuum at 10 mm Hg for one (1) hour].
- Primary (product, vent, and vapor return) air pressure piping test at seventy-five (75) psi for two (2) hours with all piping soap tested.
- Secondary piping air pressure test at five (5) psi for two (2) hours with all piping soaped.
- All sumps (including top of tank and under-dispenser containment) tested before backfilling by a two (2) hour hydrostatic test above all penetrations.
- Primary and secondary tank air pressure testing at five (5) psi for one (1) hour each after backfilling and surface covering.
- Primary and secondary piping air pressure testing at five (5) psi for one (1) hour each after backfilling and surface covering.
- Test of all annular, sump and dispenser containment leak detection devices for operability in accordance with LG-113. Upon successful demonstration, authorization to receive a delivery will be provided.

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- For modifications: integrity testing by state licensed tank tester.
- For tank installations: Enhanced Leak Detection testing. If a failure results, then repairs must be made immediately and retest performed prior to operation/permit issuance.

Final Inspections

Final inspections will include testing all leak detection devices while verifying failsafe, positive shutdown and/or slow flow features and compliance to all requirements, including fire and life safety items. All necessary documents must be provided.

Upon successful completion of the final inspection, including the receipt of all pertinent documents and fees, a CUPA Consolidated Permit will be issued, if necessary.

Specific Requirements

The following requirements are in addition to or interpretations of reference codes, statutes and regulations:

1. All laws, codes and regulations must be obeyed at all times.
2. Plans must indicate the locations of all equipment and devices pertaining to the UST system whether existing or being modified or installed.
3. All existing non-conforming items relating to the scope of work will be expected to meet current requirements as part of this project.
4. Plans and permits are valid for only one (1) year.
5. Manufacturer's recommendations are the minimum standards. Have all pertinent equipment manuals available on-site at all times for referral.
6. Lead person(s) must be qualified for the project type and directing other workers. Proof of qualification must be provided immediately upon request by the Anaheim Fire Department.
7. Site safety plan must be present at site during all work activities.
8. A tank may not be delivered to the site or set while pressurized.
9. Re-installation of a previously used tank must comply with the California Fire Code and be re-certified by the original manufacturer.
10. Interior lining of an UST is not allowed.
11. Cathodic protection systems are prohibited.
12. Anchoring is required if the tank bottom will be within twenty (20) feet of the highest annual groundwater depth at location.
13. All nonmetallic tanks containing flammable liquids must have a grounding system installed to dissipate potential electrical charges.
14. Pneumatic (compressed air) testing shall not be used for tanks or piping containing flammable or combustible liquid or vapor.
15. Fill piping must be secondarily contained with continuous monitoring.
16. All fiberglass reinforced plastic piping shall have flexible joints at the tank, dispenser, vent riser and where differential movement can occur.
17. When allowed, vent piping may only be manifolded at top of riser.
18. All leak detection devices must be located to detect and annunciate a release from primary containment at the earliest possible moment.
19. All leak detection devices (except certain line leak detectors and those associated with qualifying emergency generator tanks) must cause positive shutdown of product piping supply and have failsafe feature.
20. Two (2) overfill devices are required.
21. No discriminating sensors may be installed.
22. Monitoring system annunciator must be located such that the supervisor of dispensing is immediately able to observe audible and visual alarms. Offsite monitoring must be continuously supervised.

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.