Kerrville Fire Marshal

87 Coronado Drive Kerrville, Texas 78028
Office: (830) 257-8449 Fax: (830) 257-8455

Section 5

Aboveground Storage Tanks

Flammable Liquids

These guidelines are to be followed for all temporary storage and dispensing of Class I and II liquids for private use at construction sites, earth-moving projects, and gravel pits or borrow pits within the City of Kerrville.

All temporary aboveground storage tank requirements for the purposes of these guidelines and any other guidelines or requirements of the Fire Marshal shall conform to the *International Fire Code* as adopted and amended by the City of Kerrville and *NFPA 30*.

This guide does not replace, nor supersede any adopted codes and/or ordinances adopted by the City of Kerrville, or determinations and positions of the Fire Chief or Fire Marshal.

Aboveground Storage Tank Requirements

1. Tanks must be installed by a licensed or approved aboveground storage tank installer.
2. Approved flame arrestors and venting devices shall be installed in the all vent lines. (*IFC*, Section 5704.2.7.3.2).
3. The tank(s) shall be provided with secondary containment. All tanks must meet or exceed UL 142.
4. The tank(s) must meet, or exceed UL 2085 when subject to vehicular impact or pose a significant hazard based upon contents or location.
5. When the installation location may be subject to vehicular impact, bollards designed in accordance with *IFC*, Section 312 shall be installed.
6. The tank must display the UL Listing placard.
7. A leak detection system must be installed, equipped with on-site audible and/or visual warning devices, as approved by *IFC* and *NFPA 30*.
8. A spill container having a capacity of not less than 5 gallons shall be provided at each fill connection.
9. An overfill prevention system shall be provided for each tank to prevent being filled in excess of 95% capacity. The system must meet the requirements of *IFC*, Section 5704.2.9.7.5: 5704.2.9.7.5 During fill operation, the system shall:
    a. Provide an independent means of notifying the person filling that the fluid level has reached 90 percent of tank capacity by providing a tank level gauge marked at 90 percent of tank capacity, or other approved means.
    b. Automatically shut off the flow of fuel to the tank when the quantity reaches 95 percent of tank capacity.
    c. Reduce the flow rate to not more than 15 gallons per minute so that at the reduced flow rate, the tank will not overflow for 30 minutes, and automatically shut off flow into the tank so that none of the fittings on the top of the tank are exposed to product because of overfilling.
10. The tank fill connection shall be provided with a means for making a direct connection to the tank's vehicle fuel delivery hose so that no fuel is exposed to the open air during the filing operation.
11. Anti-siphon devices shall be installed in each pipe connected to the AST, where the piping extends below the level of the tank.
12. Emergency shut-offs shall be provided during filling and dispensing operations.

13. Relief valves shall be provided.
14. Pump dispensing devices shall be equipped with vapor-recovery connections.
15. Appropriate labeling and signs in accordance with *IFC*, Section 5704.2.3, must be provided;
    a. A permanent sign shall be placed at the fill point for the tank, documenting the filling procedure and tank calibration chart.
    b. "Smoking or Open Flames Prohibited"
    c. An approved emergency procedures sign in accordance with *IFC*, Section 2304.3.5
    d. A permanent sign indicating that when filling the tank, parking is prohibited in the fire lane.
    e. A placard specifically identifying the material therein. The placard shall be *IAW NFPA* 704.
16. Dispensing locations shall limit fuel delivery to 25 gallons and require a manual action to resume, per *IFC,* Section 2304.3.7.
17. Any additional requirements of *NFPA 30* and/or *IFC*, Chapter 50, must also be met

Submittal Requirements

18. The submittal package must include all above requirements and such requirements shall be identified in the submittal package.
19. Provide a written description of the operation of the tank.
20. Site plan drawings of the installation location and layout, to include; including
    a. Primary and emergency power hookups (if provided);
    b. All buildings and structures;
    c. Fire lanes and fire hydrants;
    d. Location(s) of other dispensing locations (if remote) and other tanks (if provided).
21. A full equipment listing of all tanks, piping, valves, and other equipment.
22. Manufacturer documentation for all parts and materials used in the project, this is to include the pumps, relief valves, and tank.
23. Plan drawings to include the above requirements shall be submitted for review and approval, **PRIOR** to installation.
24. Plan drawings shall show both plan view, section view, and other pertinent information.
25. Plan drawings shall be generated by the installing company, and shall not be copied and marked according to installation.
26. Provide documentation of tank testing and ability to hold a vacuum. This is in addition to any testing required by the Fire Department.
27. ***No aboveground storage tank(s) or associated equipment may be installed, located, or otherwise manipulated on the site until an AST Permit is issued for the location.***

General Submittal Requirements

28. Each submittal shall have a completed Kerrville Fire Marshal Plan Review/Permit Application.
29. Plans approved by the Fire Marshal's Office give authorization for construction. Final approvals are subject to field verification. Any approval issued by the Fire Marshal's Office does not release the contractor or property owner from the responsibility of full compliance with all applicable codes and ordinances relating to the construction project.
30. All installations must concur with the approved plans. Any deviation from the approved plans requires a re-submittal to the Fire Marshal's Office.
31. All fire marshal inspection forms and permits shall be kept in a permit packet on the job site until final inspection.