



MOBILE FIRE - RESCUE DEPARTMENT

FIRE CODE ADMINISTRATION

Aboveground Fuel Storage Tank Plan Review

Date: ____/____/20____

Facility Name: _____

Facility Address: _____

Building Code Permit Number (if applicable) BLD- 20____ - _____

Floor Plan Providing:

1. ____ A common scale is used and plan information is legible.
2. ____ Equipment symbol legend.
3. ____ Scaled floor or site plan showing room, room dimensions, equipment placement or location in relation to buildings, streets, property lines, or other public ways.

Other Information to Be Provided in a Specification Sheet or on the Plan:

Tank Construction:

4. ____ Equipment is listed for intended use and specification listing data sheets are provided.
5. ____ Tank is listed or designed in accordance with recognized engineering practices, 3404 and NFPA 30
6. ____ Tanks constructed with integral secondary containment are UL 142 listed or designed in accordance with recognized engineering practices, NFPA 30.
7. ____ Exterior protected above-ground storage tank has secondary containment drainage control or diking, 3404.
8. ____ Each tank has a permanent nameplate identifying its design standard, 3404.

Tank Venting:

9. ____ The use of a flame arrester or venting device in a vent line is in compliance with their listing also compliant with API 2028 for a flame arrester, 3404.
10. ____ A tank's normal vent is not less than 12 ft. above adjacent grade nor located to trap vapors under eaves, and at least 5 ft. from building openings, or property lines, 3404.

11. _____ A tank's normal vent does not have a manifold, 3404.
12. _____ Tank emergency vent does not vent inside a building, 3404.

Openings Other Than Vents:

13. _____ Filling, emptying, and vapor recovery openings are located outside the building, not less than 5 ft. from building openings or lot lines, 3404.
14. _____ For top load tanks, a metallic fill pipe is installed to minimize static electricity by terminating within 6 inches of the tank bottom, 3404. Tank openings are on the top only, 3404.
15. _____ A spill container with a capacity of not less than 5 gallons, is provided for each fill connection. Top fill containers are noncombustible, fixed to the tank and equipped with a manual drain valve that drains into the main tank, 3404.

Overfill Requirements:

16. _____ A tank storing Class I, II, IIIA liquids outside a structure is equipped with a device or means to prevent overflow in accordance with 3404.
17. _____ Outside tanks with a volume of more than 1,320 gallons that contain Class I, II, or IIIA liquids have an approved overfill prevention system, 3404.
18. _____ Tanks storing Class I, II, and IIIA liquids inside a building are equipped with a device to prevent overflow into the building and are not limited to a float valve, a preset meter in fill line, or a valve actuated by the weight of the tank's content, 3404.

Piping:

19. _____ Connections to tank that are below the liquid level are provided with an internal or external control valve near the tank shell, 3403.
20. _____ Tank piping is supported and protected from mechanical damage or fire exposure, 3403. and 3403.
21. _____ Pipe joints are liquid tight, welded, threaded or flanged, Class 1 liquid joints are welded if the joints are located inside the building, 3403.
22. _____ Pipe testing criteria is detailed on the plans, hydrostatic tested to 150 percent of the system design pressure or pneumatically tested to 110 percent of the system design pressure for a minimum of 10 minutes with no leakage, 3403.
24. _____ Piping is labeled in accordance with ANSI A13-1, 2703.
25. _____ Fill pipe connection is designed to provide a direct connection to the vehicle's fuel delivery hose so fuel is not exposed to the air during filling, 3404.

Valves:

26. _____ Piping has sufficient number of control valves and check valves to control the flow of liquids, 3403.
27. _____ Any portion of the fill pipe is below the top of the tank, a check valve is installed at the fill pipe not more than 12 in. from the fill hose connection, 3404.

Tank Support:

28. _____ Tank foundation, support, and anchorages are designed in accordance with NFPA 30 and the IBC, IFC 3404.

29. _____ Tanks containing Class I, II, and IIIA liquids that are elevated more than 12 inches above grade shall have a fire-resistance rating of not less than 2 hours in accordance with ASTM E 1529 unless one of the three exceptions to section 3404 is applicable.

Miscellaneous:

30. _____ Plans show location and verbiage for signs prohibiting open flames and no smoking, 3403, 3404, 2703, and 2703.
31. _____ Tanks exceeding 100 gallons have NFPA 704 placard location and content detailed on the plans, 3404.
32. _____ Tank subject to vehicular damage is protected by guard posts designed in accordance with Section 312
33. _____ Drainage control and diking are provided along with containment capacity calculations unless a technical report is provided stating no hazard exists, or the tank is a listed tank with secondary containment, 3404.
34. _____ When provided the design of the dike systems complies with 3404
35. _____ When required, ASTs are seismically anchored in accordance with the IBC, and NFPA 30.

Review/Inspection Date ____ / ____ / ____ **Reviewer:** _____