MCKINNEY FIRE DEPARTMENT FIRE MARSHAL'S OFFICE

ABOVEGROUND STORAGE TANKS CLASS IIIB LIQUIDS

These guidelines are to be followed when an aboveground storage tank is relocated, modified or otherwise installed within the City of McKinney. This guide applies only to the installation, storage and/or use of Class IIIB Combustible Liquids, as defined by the 2015 International Fire Code.

INSTALLATION REQUIREMENTS

- 1. The tank(s) shall be provided with secondary containment.
- 2. The tank(s) shall meet, or exceed UL 142, and the provisions of NFPA 30.
- 3. Tank(s) shall be constructed of steel, unless the conditions of NFPA 30 Section 21.4.1.5 are met, and approved by *fire code official*.

NFPA 30 Section 21.4.1.5

21.4.1.5 Tanks shall be permitted to be constructed of combustible materials when approved. Tanks constructed of combustible materials shall be limited to any of the following:

- (1.) Underground installation
- (2.) Use where required by the properties of the liquid stored
- (3.) Aboveground storage of Class IIIB liquids in areas not exposed to a spill or leak of Class I or Class II liquid
- (4.) Storage of Class IIIB liquids inside a building protected by an approved automatic fire-extinguishing system
- 4. When the installation location may be subject to vehicular impact, bollards designed IAW IFC Section 312, or a UL 2085 tank may be required, based upon a review of the hazards and protection provided.
- 5. The tank must display the UL Listing placard.
- 6. Normal and emergency venting shall be provided. Emergency venting shall include the calculations to determine the minimum vent sizing in CFH.
- 7. Approved flame arrestors, when required by API 2028, and venting devices shall be installed in the all vent
- 8. A spill container having a capacity of not less than 5 gallons shall be provided at each fill connection.
- 9. Appropriate labeling and signs in accordance with IFC 2015, Section 5404.2.3, must be provided.
 - a. "Smoking or Open Flames Prohibited".
 - b. Emergency procedures.
 - c. NFPA 704 or equivalent placard specifically identifying the material therein.
- 10. All piping and piping systems shall be designed in accordance with NFPA 31 and the 2015 IFC.

To expedite the plan review and inspection processes, please refer to the information listed below.

PERMITTING REQUIREMENTS

- 11. Provide a written description and intent of the installation.
- 12. Drawings of the installation and conditions shall including the following;
 - a. Interior installations shall indicate all buildings, structures and walls.
 - b. Exterior installations shall indicate all buildings, structures, walls, fire lanes and fire hydrants.
- 13. Full equipment listing of all tanks, piping, valves, and other equipment.

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- 14. Manufacturer documentation for all parts and materials used in the project.
- 15. Indicate the maximum working pressure of the tank(s) and piping.
- 16. Drawings shall be generated by the installing company specific to the installation. Drawings shall show plan view and other pertinent information.
- 17. Submittal package must identify and include all the above requirements to be accepted for review.
- 18. <u>Installation on site shall be prohibited until an AST Class IIIB Permit has been issued. Any work performed prior to the issuance of this permit may result in a citation being issued for violation of Section 113.3 of the 2015 International Fire Code.</u>

GENERAL SUBMITTAL REQUIREMENTS

- 19. Each submittal shall have a completed McKinney Fire Department Plan Review Permit Application.
- 20. Plans approved by the Fire Marshal's Office give authorization for installation. 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.
- 21. All fire department inspection forms and permits shall be kept on the job site until final inspection.
- 22. All installations shall comply with the approved plans. Any deviation from the approved plans requires a resubmittal to the Fire Marshal's Office.

All aboveground storage tank requirements for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the 2015 International Fire Code, as adopted and amended by City of McKinney, and NFPA 30, Flammable and Combustible Liquids Code.

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