



DATE: November 7, 2007
TO: All Natural Gas Well Drillers
FROM: Fort Worth Fire Marshal
RE: Fire Code Permit Requirements for Flammable and Combustible Liquids Gas Well Drilling

This notification is to inform all gas well drillers of the Fort Worth Fire Department requirement to obtain Flammable and Combustible Liquids Operational Permits specifically for the diesel tanks associated with gas well drilling in accordance with the Fort Worth Fire Code.

Temporary flammable and combustible liquids tanks that are located on gas well drilling sites to supply fuel to generators for the drilling rig are required to be permitted through the Fire Department via a Flammable and Combustible Liquids Operational Permit. The same permit is required for any other temporary flammable or combustible liquids tanks that may be located on site for the purpose of dispensing or fueling of equipment. Contact 817-392-6840 to obtain a permit application. The fee is \$50.00 per permit. Compliance with Section 3406.2 of the Fort Worth Fire Code is required, as copied at the end of this notification.

Should you have any questions concerning this matter after reviewing the above requirements, please contact the Fort Worth Fire Prevention Bureau at 817-392-6840.

Thank you for your assistance and cooperation in this matter in the interest of life safety.

Fort Worth Fire Code Section 3406.2:

“3406.2 Storage and dispensing of flammable and combustible liquids on farms and construction sites.

Permanent and temporary storage and dispensing of Class I and II liquids for private use on farms and rural areas and at construction sites, earth-moving projects, gravel pits or borrow pits shall be in accordance with Sections 3406.2.1 through 3406.2.8.1.

Exception: Storage and use of fuel oil and containers connected with oil-burning equipment regulated by Section 603 and the *International Mechanical Code*.

3406.2.1 Combustibles and open flames near tanks.

Storage areas shall be kept free from weeds and extraneous combustible material. Open flames and smoking are prohibited in flammable or combustible liquid storage areas.

3406.2.2 Marking of tanks and containers.

Tanks and containers for the storage of liquids above ground shall be conspicuously marked with the name of the product which they contain and the words: FLAMMABLE—KEEP FIRE AND FLAME AWAY. Tanks shall bear the additional marking: KEEP 50 FEET FROM BUILDINGS.

3406.2.3 Containers for storage and use.

Metal containers used for storage of Class I or II liquids shall be in accordance with DOTn requirements or shall be of an approved design.

Discharge devices shall be of a type that do not develop an internal pressure on the container.

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Pumping devices or approved self-closing faucets used for dispensing liquids shall not leak and shall be well-maintained. Individual containers shall not be interconnected and shall be kept closed when not in use.

Containers stored outside of buildings shall be in accordance with Section 3404 and the *International Building Code*.

3406.2.4 Permanent and temporary tanks.

The capacity of permanent above-ground tanks containing Class I or II liquids shall not exceed 1,100 gallons (4164 L). The capacity of temporary above-ground tanks containing Class I or II liquids shall not exceed 10,000 gallons (37 854 L). Tanks shall be of the single-compartment design.

Exception: Permanent above-ground tanks of greater capacity which meet the requirements of Section 3404.2.

3406.2.4.1 Fill-opening security.

Fill openings shall be equipped with a locking closure device. Fill openings shall be separate from vent openings.

3406.2.4.2 Vents.

Tanks shall be provided with a method of normal and emergency venting. Normal vents shall also be in accordance with Section 3404.2.7.3.

Emergency vents shall be in accordance with Section 3404.2.7.4. Emergency vents shall be arranged to discharge in a manner which prevents localized overheating or flame impingement on any part of the tank in the event that vapors from such vents are ignited.

3406.2.4.3 Location.

Tanks containing Class I or II liquids shall be kept outside and at least 50 feet (15 240 mm) from buildings and combustible storage. Additional distance shall be provided when necessary to ensure that vehicles, equipment and containers being filled directly from such tanks will not be less than 50 feet (15 240 mm) from structures, haystacks or other combustible storage.

3406.2.4.4 Locations where above-ground tanks are prohibited.

The storage of Class I and II liquids in above-ground tanks is prohibited within the limits established by law in the adopting ordinance as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Ordinance for Adoption of the *International Fire Code* on page v).

3406.2.5 Type of tank.

Tanks shall be provided with top openings only or shall be elevated for gravity discharge.

3406.2.5.1 Tanks with top openings only.

Tanks with top openings shall be mounted as follows:

1. On well-constructed metal legs connected to shoes or runners designed so that the tank is stabilized and the entire tank and its supports can be moved as a unit; or
2. For stationary tanks, on a stable base of timbers or blocks approximately 6 inches (152 mm) in height which prevents the tank from contacting the ground.

3406.2.5.1.1 Pumps and fittings.

Tanks with top openings only shall be equipped with a tightly and permanently attached, approved pumping device having an approved hose of sufficient length for filling vehicles, equipment or containers to be served from the tank. Either the pump or the hose shall be equipped with a padlock to its hanger to prevent tampering. An effective antisiphoning device shall be included in the pump discharge unless a self-closing nozzle is provided. Siphons or

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internal pressure discharge devices shall not be used.

3406.2.5.2 Tanks for gravity discharge.

Tanks with a connection in the bottom or the end for gravity-dispensing liquids shall be mounted and equipped as follows:

1. Supports to elevate the tank for gravity discharge shall be designed to carry all required loads and provide stability.
2. Bottom or end openings for gravity discharge shall be equipped with a valve located adjacent to the tank shell which will close automatically in the event of fire through the operation of an effective heat-activated releasing device. Where this valve cannot be operated manually, it shall be supplemented by a second, manually operated valve.

The gravity discharge outlet shall be provided with an approved hose equipped with a self-closing valve at the discharge end of a type that can be padlocked to its hanger.

3406.2.6 Spill control drainage control and diking.

In-door storage and dispensing areas shall be provided with spill control and drainage control as set forth in Section 3403.4. Outdoor storage areas shall be provided with drainage control or diking as set forth in Section 3404.2.10.

3406.2.7 Portable fire extinguishers.

Portable fire extinguishers with a minimum rating of 20-B:C and complying with Section 906 shall be provided where required by the fire code official.

3406.2.8 Dispensing from tank vehicles.

Where approved, liquids used as fuels are allowed to be transferred from tank vehicles into the tanks of motor vehicles or special equipment, provided:

1. The tank vehicle's specific function is that of supplying fuel to motor vehicle fuel tanks.
2. The dispensing line does not exceed 100 feet (30 480 mm) in length.
3. The dispensing nozzle is an approved type.
4. The dispensing hose is properly placed on the approved reel or in a compartment provided before the tank vehicle is moved.
5. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the vehicle or the point of refueling are prominently posted on the tank vehicle.
6. Electrical devices and wiring in areas where fuel dispensing is conducted are in accordance with the ICC *Electrical Code*.
7. Tank vehicle-dispensing equipment is operated only by designated personnel who are trained to handle and dispense motor fuels.
8. Provisions are made for controlling and mitigating unauthorized discharges.

3406.2.8.1 Location.

Dispensing from tank vehicles shall be conducted at least 50 feet (15 240 mm) from structures or combustible storage.”

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