

## Questions of Fire Marshal's Office Fuel Storage Division

### 1) What are the regulations, in distance/feet, for fuel tank placement from buildings, property lines, other utilities, pump placement?

- Electrical must be hardwired in conduit with explosion proof fittings, for Class I or gasoline tanks, according to the National Electric Code. Diesel tanks require hardwiring but do not require explosion proof fittings. Electric extension cords cannot be used to power fuel pumps.
- Emergency fuel shut off switch must be available, should be located on the exterior of the building and visible from fuel station.
- Emergency fuel shut off switch must be identified with a sign.
- Underground fuel facilities must have properly trained, with licensed Class A, B, or C operators.
- Distances:
  - Fuel tanks used for fueling equipment, vehicles, etc. must be located at least 100 feet from property line.
  - Fuel tanks must be located at least 50 feet from nearest important building.
  - Fuel pump must be located at least 50 feet from tank.
  - UL 2080, fire rated, fuel tanks must be located at least 25 ft. from nearest important building.
  - UL 2085, fire rated, fuel tanks must be located at least 5 ft. from nearest important building.
- Fuel tanks located inside buildings must have venting a minimum two feet above roof line.
  - Fuel can only be dispensed from a container/tank that does not exceed 120 gallons. NFPA 9.2.4
  - If tank inside building contains Class I fuel or gasoline, entire building would require wiring for Class I Division I. NFPA 30
  - Holes cannot be cut in shop walls to run fuel hose through to fuel equipment inside from tanks located outside building
- There is no grandfather clause for fuel tank installations.
- Facilities shall have an emergency plan to respond to fire or other emergencies and shall be kept readily available.
- A fuel tank is any container larger than 60 gallons and must comply with fuel storage regulations.
- Above ground fuel storage tanks must be equipped with emergency venting terminating at least 12 ft. above the ground for Class I fuels or gasoline, and above snow line for Class II fuels or diesel.
- Any piping located above ground must be steel.
- The following decals/signs are required:
  - NO SMOKING
  - SHUT OFF ENGINE WHEN REFUELING
  - DO NOT USE ELECTRONIC EQUIPMENT
  - IDENTIFICATION OF CONTENTS (TWO SIDES OF TANK)
  - LOCATION OF EMERGENCY FUEL SHUT OFF
- Protective posts/barriers are required to protect the pump/tank from errant vehicles.
- Fire extinguisher is required within 100 feet of fuel storage tanks.
- A fuel containment system, liquid tight, is required on all above ground fuel tanks.
- Handrail is required on steps and fuel depot platform and requires top and mid rails.

**Fuel pumps may be installed on the tank if tank is a UL listed, fire resistant tank.**

- **Propane tank installations**

- 500 gallon and smaller tanks may be installed no closer than 10 ft. from the nearest building.
- 500 to 2000 gallon may be installed no closer than 25 ft. from the nearest building.
- Any propane tank must be at least 20 ft. from any liquid fuel tank.
- Propane tank must be 50 ft. away from any liquid dispenser for motor vehicle fueling.

**2) Are overhead tanks permitted? Do they also require containment?**

Overhead tanks are allowed in certain cases:

At remote, rural temporary construction sites, this shall be determined by authority having jurisdiction.

Tank size is limited to less than 1,100 gallons nominal capacity

Must be a minimum of 40 feet from nearest important building

**These types of tanks do not require containment if the above criteria have been met.**

**3) What are the advantages or disadvantages of underground tanks compared to above tanks?**

Advantages and disadvantages for both, depending on location and need of the individual operation or facility

**4) What are the containment regulations for above ground fuel tank placement?**

NFPA 30 requires that the containment system needs to be liquid tight, must be:

- constructed of earth, metal or concrete
- walls must be able to withstand a full hydrostatic head
- sides, top and bottom constructed to be liquid tight
- capable of containing a complete release from the largest tank inside the containment

**5) Are certified installers required in the State of Nebraska? Can any work be done by county forces?**

Aboveground—No certification required

Underground—Yes only licensed and certified contractors can install tank systems

**6) Are there fuel tank capacity regulations?**

At fleet facilities where only Class II liquids are stored and dispensed the maximum of 80,000 gallons is allowed with no tank larger than 20,000 gallons.

At facilities where Class I and Class II liquids are stored and dispensed, Class I, or gasoline, storage tank may not be larger than 12,000 gallons for fleet fueling.

**7) What is the permitting process? Fees?**

Permits to install are required for either USTs or ASTs. Permits are obtained through our office or in certain cases from a State Fire Marshal Delegated Authority. The fees are:

USTs--\$50.00 per tank and associated piping, or \$50.00 for piping only (regardless of # of tanks)

ASTs--\$50.00 for all tanks and /or piping only

**8) What are the requirements and deadlines that must be met to comply with current regulations?**

ALL requirements must be in place NOW except for Operator Training at UST sites. The deadline at those sites is December 31, 2015. (about 3 weeks)

**9) Can fuel tanks containing different fuels be buried in same hole?**

YES

**10) What are some estimated costs associated with meeting requirements of underground fuel storage tanks?**

DEPENDS. I know this is an important question but with the variety of choices a single facility may have it's very difficult to fit them into a session and format like this. Working with a Flammable Liquids Storage Tank Deputy from our office as well as a qualified petroleum equipment provider will assist in coming up with the right compliance package for each facility.

**11) What if an underground fuel facility is in place and the county does not have enough employees to have an A, B, or C licensed employee available at all times? Can non-licensed county employees fuel up or do they have to wait until licensed employee is present?**

Class "C" operators are not required to be on site for fleet fueling operations.

**12) How are the regulations different for placement of underground fuel storage tanks compared to above ground fuel storage tanks?**

The separation from buildings, property lines, public rights-of-way, and the dispensing devices are far more onerous when aboveground storage tanks are utilized.

Separation distance can be significantly reduced by using an aboveground that is either in a vault OR constructed in a manner that it will be protected from fire

These distance/separation requirements virtually "go away" for underground storage tanks.

Where space is a premium, underground tanks may be the best choice.

**13) Does the Fire Marshall's office have a list of certified contractors in Nebraska?**

Yes. A current listing of both licensed closure contractors and licensed installation contractors can be found on the web site ([www.sfm.ne.gov](http://www.sfm.ne.gov)). These licensed contractors are necessary when activity is performed on UNDERGROUND tanks. Contractors who provide activity on ABOVEGROUND tanks are not required to be licensed. You may find that many licensed underground contractors provide services for aboveground tanks as well.