

At Superior Energy Systems, our staff has years of experience in the handling of propane fuel, engineering of systems and equipment manufacturing. Whether your application is for base load or stand-by systems, terminals, vaporizers, mixers, tanks, service, parts or training, Superior Energy is there to help you with any service that you need. We can also provide feasibility studies, site inspections, needs surveys, design and engineering, and equipment. If you're considering a new propane system, a replacement system, an upgrade, dismantling & removal of systems, new equipment, safety & compliance training, or simply need spare parts, SES can help.

### Some of the clients that we are currently working with:

- Duke Energy
- Equitable Gas
- Ultramar
- Ferrellgas
- Dominion Transmission
- Targa
- Plains Marketing
- Petrologistics
- SemStream
- Kidde

The SES Team has over 100 years experience in the design and construction of propane facilities. Don't get fooled and hire beginners to get their on-the-job-training on your job site.

Superior Energy Systems is the nation's leading expert on propane facilities. We have the experience and credentials to build, modify, relocate and service any propane plant or terminal. SES also manufactures metering and odorant skids, rail towers and canopies for the retail propane sector.

# ATTENTION

## ALL PROPANE BULK STORAGE FACILITIES!!!

NFPA 58 has announced new requirements for all propane bulk storage facilities that must be met by the year 2011. Any storage facility with an aggregate over 4,000 gallons water capacity must comply with these new 2011 regulations. Tanks must be fitted with internal valves or an Emergency Shutoff Valve (ESV) near the inlet or outlet of the storage tanks. The regulations also have provisions for thermal protection and remote shutdowns for the valves.



Call SES today at  
**440-236-6009 ext 235**



**Superior Energy Systems, Ltd.**  
**Corporate Offices**

13660 North Station Road  
Columbia Station, OH 44028  
Phone: (440) 236-6009 / Fax: (440) 236-6002  
[www.SuperiorEnergySystems.com](http://www.SuperiorEnergySystems.com)

To safeguard propane installations, the NFPA and the US EPA have developed the FSA and O&M instructions that all-applicable propane facilities must comply within a certain time frame.

The 2001 edition of the National Fire Protection Associations (NFPA) Pamphlet 58, Liquefied Petroleum Gas Code requires a written Fire Safety Analysis (FSA) and written Operations & Maintenance Instructions. These requirements originated at the US Environmental Protection Agency (EPA) under the Risk Management Program (RMP). The NFPA 58 requirements are much less restrictive than what the EPA originally proposed.

The requirement for a written (FSA) for all tank installations over 4,000 gallons aggregate capacity becomes effective when your State adopts the 2001 edition NFPA 58, section 3.10, Fire Protection. New propane bulk plants and tank installations and for ASME tank installations on roofs, must complete an FSA before completion of the new facility. Also, a written FSA is required for all-existing bulk plants, tanks and roof installations by three years after the effective date of the code.

These new regulations can be confusing but are none the less THE LAW and must be complied with. An example of these new codes can be found in the excerpts from the NFPA58 listed below:

## Containers over 4000 gal (15.2 m<sup>3</sup>) water capacity shall be equipped as follows:

- (1) For vapor withdrawal openings, either of the following:
  - a) A positive shutoff valve that is located as close to the container as practical in combination with an excess flow valve installed in the container
  - b) An internal valve with an integral excess-flow valve or excess flow protection
- (2) For liquid withdrawal openings, any of the following:
  - a) An internal valve equipped for remote closure and automatic shutoff using thermal (fire) actuation where the thermal element is located within 5 ft (1.5 m) of the internal valve.
  - b) Internal valves installed in containers equipped for remote closure and automatic shutoff using thermal (fire) actuation. By July 1, 2003
  - c) Containers equipped with a positive shutoff valve that is located as close to the container as is practical in combination with an excess flow valve and retrofitted by July 1, 2011, with one of the following:
    - 1) An internal valve equipped for remote closure and automatic shutoff using thermal (fire) actuation

- 2) An emergency shutoff valve equipped for remote closure and automatic shutoff using thermal (fire) actuation installed in the line downstream as close as practical to the existing positive shutoff valve
- 3) For vapor inlet openings, either of the following:
  - a) A positive shutoff valve that is located as close to the container as practical in combination with either a backflow check valve or excess-flow valve installed in the container
  - b) An internal valve with an integral excess-flow valve or excess flow protection
- 4) For liquid inlet openings, any of the following:
  - a) An internal valve equipped for remote closure and automatic shutoff using thermal (fire) actuation where the thermal element is located within 5 ft (1.5 m) of the internal valve
  - b) A positive shutoff valve that is located as close to the container as practical in combination with a backflow check valve installed in the container that is designed for the intended application
  - c) Internal valves shall be equipped for remote closure and automatic shutoff using thermal (fire) actuation as described in 2.3.3.2(b)(4)(a) by July 1, 2003
  - d) Containers equipped with a positive shutoff valve that is located as close to the container as is practical in combination with an excess flow valve and retrofitted by July 1, 2011, with one of the following:
    - 1) An internal valve equipped for remote closure and automatic shutoff using thermal (fire) actuation
    - 2) An emergency shutoff valve equipped for remote closure and automatic shutoff using thermal (fire) actuation, installed in the line upstream and as close as practical to the existing positive shutoff valve
- 3) A positive shutoff valve that is located as close to the container as practical in combination with a backflow check valve, designed for the intended application and installed in the container
- 4) A backflow check valve designed for the intended application and installed in the line upstream as close as practical to the existing positive shutoff valve.

