

Taken from on-line reading of NFPA 30A, Chapter 10:

Chapter 10 Vapor Processing and Vapor Recovery Systems for Liquid Motor Fuels

10.1 Vapor Processing Systems

10.1.1 Vapor processing system components, including hose nozzle valves, blowers, vacuum pumps, flame arresters, or systems for preventing flame propagation, controls and vapor processing equipment shall be individually listed for their intended use.

10.1.2 Dispensing devices used with a vapor processing system shall be listed. Existing listed or labeled dispensing devices shall be permitted to be modified for use with vapor processing systems provided they are "listed by Report" as specified in 6.3.2.1.

10.1.3 Means shall be provided in the vapor return path from each dispensing outlet to prevent the discharge of vapors when the hose nozzle valve is in its normal nondispensing position.

10.1.4 Vapor processing systems that employ blower-assist shall not be used unless the system is designed to prevent flame propagation through system piping, processing equipment and tanks.

10.1.5 If a component is likely to contain an ignitable vapor-air mixture under operating conditions and can fail in a manner to ignite the mixture, it shall be designed to withstand an internal explosion without failure to the outside.

10.1.6 Vapor processing equipment shall be located outside of buildings. In addition, they shall be located as follows:

- (1) At least 3 m (10ft) from adjacent property lines that can be built upon
- (2) At least 6 m (20ft) from dispensing devices

10.1.7 Where the required distance to adjacent property lines that can be built upon cannot be achieved, means shall be provided to protect the vapor processing equipment against fire exposure. Acceptable means shall include the following:

- (1) Protective enclosures constructed of fire-resistant or non-combustible materials that extend at least 455 mm (18 in) above the equipment.
- (2) Installation in belowgrade spaces

(3) Protection with an approved water spray system

- 10.1.7.1 If protective enclosures or belowgrade spaces are used, positive means shall be provided to ventilate the enclosure to prevent pocketing of ignitable vapors. In no case shall vapor processing equipment so protected be located within 1.5 m (5 ft) of adjacent property lines that can be built upon.
- 10.1.8 Processing equipment shall be protected against physical damage with guardrails, curbs or fencing.
- 10.1.9 Electrical equipment shall meet the requirements of Chapter 8.
- 10.1.10 Vent pipes on vapor processing systems shall discharge only in an upward direction in order to disperse vapors and shall terminate at least 3.6 m (12 ft) above grade. The outlets shall be directed and located so that ignitable vapors will not accumulate or travel to an unsafe location or enter buildings.
- 10.1.11 Combustion or open-flame-type devices shall not be installed in classified areas, as described in Chapter 8.
- 10.2 Vapor Recovery Systems
- 10.2.1 Dispensing devices that incorporate vapor recovery shall be listed.
- 10.2.2 Hose nozzle valves used on vapor recovery systems shall be listed for the purpose.
- 10.2.3 Means shall be provided in the vapor return path from each dispensing outlet to prevent the discharge of vapors when the hose nozzle valve is in its normal nondispensing position.