

SECTION .0700 - STANDARDS FOR STORAGE, HANDLING AND INSTALLATION OF LP GAS

02 NCAC 38 .0701 ADOPTION BY REFERENCE

The following are incorporated by reference, including subsequent amendments and editions, as standards for storage, handling and installation of liquefied petroleum gas:

- (1) National Fire Protection Association, document NFPA 58 "Liquefied Petroleum Gas Code," with the following additions and exceptions:
 - (a) "Firm Foundation" means that the foundation material has a level top surface, rests on solid ground, is constructed of a masonry material or wood treated to prevent decay by moisture rot, and will not settle, careen or deteriorate;
 - (b) No person shall use liquefied petroleum gas as a source of pressure in lieu of compressed air in spray guns or other pressure operated equipment, except that liquefied petroleum gas may be used as a source of pressure for operating internal valves and emergency shutoff valves;
 - (c) Piping, tubing, or regulators shall be considered well supported when they are rigidly fastened in their intended position;
 - (d) At bulk storage installations, the bulkhead and the plant piping on the hose side of the bulkhead shall be designed and constructed so that an application of force from the hose side will not result in damage to the plant piping on the tank side of the bulkhead. In addition, the bulkhead shall incorporate a means, for instance, mechanical or pneumatic, to automatically close emergency valves in the event of a pull away;
 - (e) As an alternative to the requirement for a fire safety analysis, the owner, or his designee, of an LP-gas facility which utilizes individual storage containers in excess of 4,000 gallons water capacity, storage containers interconnected through the liquid withdrawal outlets of the containers with an aggregate water capacity in excess of 4,000 gallons, or storage containers interconnected through the vapor withdrawal outlets of the containers with an aggregate capacity in excess of 6,000 gallons, shall, for all installations of containers of such capacity or for additions to an existing LP-gas facility which result in containers in excess of such capacity, meet with fire officials for the jurisdiction in which the facility is located in order to:
 - (i) review potential exposure to fire hazards to or from real property which is adjacent to such facility;
 - (ii) identify emergency access routes to such facility; and
 - (iii) review the equipment and emergency shut-down procedures for the facility.The owner of such facility or his designee shall document in writing the time, date and place of such meeting(s), the participants in the meeting, and the discussions at the meeting in order to provide a written record of the meeting. This documentation shall be made available to the Department not later than 60 days after installation of the new or additional containers. Compliance with the availability requirement shall be met by having a copy of the documentation kept on site or at the owner's office and available for review by NCD&CS inspection personnel as soon as it is requested. This meeting, review, and documentation shall be repeated when the North Carolina Department of Agriculture and Consumer Services determines that the plant design has changed or that potential exposures have significantly changed, so as to increase the likelihood of injury.
 - (f) An LP-gas facility which utilizes storage containers that are interconnected through the vapor withdrawal outlets of the containers only with an aggregate water capacity in excess of 4,000 gallons, but not in excess of 6,000 gallons, is exempt from the requirements of a fire safety analysis; and
 - (g) A fire safety analysis as described in NFPA 58 may be prepared by the owner of an LP-Gas facility or by an employee of such owner in the course of the employee's employment, and the Department shall not require that it be prepared, approved, or sealed by a professional engineer. Note: This is in keeping with a formal interpretation (F.I. No.: 58-01-2) by the technical committee for Liquefied Petroleum Gases issued by the National Fire Protection Association on November 7, 2001, with an effective date of November 27, 2001. However, the North Carolina Board of Examiners for Engineers and

Surveyors regulates the practice of engineering, and has taken the position that the preparation of a fire safety analysis constitutes the practice of engineering.

- (2) National Fire Protection Association document NFPA 54, "National Fuel Gas Code," with the addition that underground service piping shall rise above ground immediately (within six inches of wall) before entering a building.
- (3) National Fire Protection Association, document NFPA 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages," Chapter 12 (in 2008 Edition) as it applies to LP-Gas dispensers for motor vehicle fuel along with dispensers for other motor vehicle fuels.

Copies of NFPA 54, NFPA 58 and NFPA 30A are available for inspection in the Office of the Director of the Standards Division. They may be obtained at a cost of fifty-four dollars and fifty cents (\$54.50) each for NFPA 54 and NFPA 58 and for forty-two dollars (\$42.00) for NFPA 30A (March 2014 prices), plus shipping, by contacting National Fire Protection Association, Inc., 1 Batterymarch Park, Quincy, Massachusetts 02269, by calling them at 617-770-3000 or 800-344-3555, or by accessing them on the Internet at www.nfpa.org/catalog.

History Note: Authority G.S. 119-55;

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