

481—286.1(101) General requirements. The provisions of the National Fire Protection Association, NFPA 54, ANSI Z223.1-2024 National Fuel Gas Code, 2024 edition, and NFPA 58, Liquefied Petroleum Gas Code, 2024 edition, published by the National Fire Protection Association and available at www.nfpa.org, and all references contained therein, are hereby adopted by reference as the general requirements for transportation, storage, handling, and use of liquefied petroleum gas, with the following amendments and interpretive guidelines:

1. Where a stationary installation utilizes a storage container of more than 2,000 gallons (7,750 L) of individual water capacity, or the aggregate water capacity of storage containers in a grouping is more than 4,000 gallons (15,140 L) in water capacity, the installer shall submit plans for such installation to the department for review and approval. Installation shall not commence until written approval from the department has been received. Any reporting fire department where the tank(s) is located will be advised of each installation.

2. Underground gas piping that is outside a building shall not be in physical contact with any concrete.

3. Cylinders installed permanently on roofs of buildings are prohibited.

4. All training programs shall be instructor-led by a competent trainer and include a closed book test and a skills assessment.

5. Prior to acceptance and initial operation, all piping systems (including hose) shall be visually inspected and pressure-tested by the installer to determine that the materials, design, fabrication, and installation practices comply with the requirements of this chapter.

- a. Pressure testing of piping systems is required as follows:

- i. Piping systems with operating pressures greater than 20 psi shall have a test pressure no less than 50 psi and shall not exceed 75 psi.

- (1) The test medium used for pressure testing shall be air, nitrogen, carbon dioxide, or an inert gas.

- (2) Propane vapor may be used; propane liquid shall not be used.

- ii. Piping systems having operating pressures of 20 psi or less, and piping to which NFPA 54, National Fuel Gas Code, is applicable shall be pressure tested in accordance with that code.

- (1) The test medium used for pressure testing shall be air, nitrogen, carbon dioxide, or an inert gas.

6. On or after January 1, 2012, the use of railroad tank cars in stationary service will be prohibited.

- a. Existing installations with prior approval of the department (documented in writing) will be permitted to remain in service.

7. To the extent that NFPA standards are inconsistent with International Fire Code standards, the NFPA standards shall rule.

This rule is intended to implement Iowa Code chapter 101.

[ARC 8910C, IAB 2/19/25, effective 3/26/25; Editorial change: IAC Supplement 7/9/25]