CHAPTER 200

LIQUEFIED PETROLEUM GAS

Authority

N.J.S.A. 34:1-20, 34:1A-3(e) and 21:1B-2.

Source and Effective Date

R.1990 d.436, effective August 3, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Executive Order No. 66(1978) Expiration Date

Chapter 200, Liquefied Petroleum Gas, expires on August 3, 1995.

Chapter Historical Note

Chapter 200, Liquefied Petroleum Gas, was filed and became effective prior to September 1, 1969. Amendments became effective May 15, 1980, as R.1980 d.143. See: 11 N.J.R. 560(f), 12 N.J.R. 280(a). Chapter 200 expired on May 15, 1985 and new rules were adopted, pursuant to Executive Order No. 66(1978), as R.1985 d.403, effective August 5, 1985. See: 17 N.J.R. 1379(a), 17 N.J.R. 1899(a). Chapter 200 was readopted as R.1990 d.436. Subchapter 5, API 2510 Installations, was adopted as a new rule and prior Subchapter 5, Submittal of Plans or Project Data Report, was recodified as Subchapter 6. See: Source and Effective Date. See subchapter and section levels for further rulemaking activity.

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SUBCHAPTER 1. GENERAL PROVISIONS

12:200-1.1 Purpose and scope

- (a) The purpose of this chapter is to provide minimum standards for liquefied petroleum gas systems for the preservation of health and safety of the general public.
- (b) This chapter shall apply to the design, construction, location, installation and operation of liquefied petroleum gas installation and operation of liquefied petroleum gas installations for health and safety.
- (c) This chapter shall apply, except as provided in (d) below, to all liquefied petroleum gas systems at places of employment for the protection of the health and safety of the public at large.
 - (d) This chapter shall not apply to the following:
 - 1. The transportation of liquefied petroleum gases over the highways in intrastate or interstate commerce; or
 - 2. The installation of liquefied petroleum gas facilities at use group R-3 occupancies (one and two family residential); or
 - 3. Liquefied petroleum gas vapor piping inside of buildings; or
 - 4. Employees subject to the Occupational Safety and Health Act, 29 U.S.C. 651 et seq.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Deleted old N.J.A.C. 12:200–1.1, "Title and Citation." Recodified from N.J.A.C. 12:200–1.2 and 1.3, making 1.2 new 1.1(a) and 1.3(a)-(c) as new 1.1(b)-(d). In new N.J.A.C. 12:200–1.1(d)2, added group R-3 occupancies and "one and two family residential." In (d)3, added "vapor" to describe piping and deleted language, "... that is downstream of final stage regulation and outside ...," and replaced with "inside" of buildings.

12:200-1.2 DEPT. OF LABOR

12:200-1.2 Existing installations

Installations within the scope of this chapter, which were installed on or before the effective date of this chapter, may be continued in service unless the continued operation of such equipment and installations constitute a serious and substantial threat to health and safety.

Recodified from N.J.A.C. 12:200-1.7 by R.1990 d.436, effective September 4, 1990.

See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Prior N.J.A.C. 12:200-1.2 was "Purpose," which was recodified to N.J.A.C. 12:200-1.1.

12:200-1.3 Compliance

- (a) All liquefied petroleum gas installations shall be acceptable to the commissioner.
- (b) The public health and safety issues of a liquefied petroleum gas system shall be subject to the approval of the commissioner. Zoning considerations shall be the responsibility of the municipality in which the system is located.
- (c) The user/owner shall be responsible that the liquefied petroleum gas facility is installed and maintained in a safe operating condition.
- (d) All liquefied petroleum gas facilities shall be installed and maintained in accordance with this chapter, except as provided in 1.2 above.
- (e) Only a qualified person shall sell, fill, or refill liquefied petroleum gas at a dispensing or distributing point.
- (f) No person shall install, remove, connect, disconnect, fill or refill any liquefied petroleum gas container without permission of the owner of the container.
- (g) The commissioner may order the user of a system to meet additional requirements:
 - 1. Where unusual conditions exist; and
 - 2. When it is necessary for the protection of the health, safety or welfare of persons; and
 - 3. Provided the additional requirements are within the intent and purpose of the Act.
- (h) LP-Gas installations having a product vapor pressure greater than that allowed for commercial propane each measured at 100° F shall be subject to the approval of the commissioner.
- (i) Containers, other than cylinders in USDOT service, shall be registered as provided in N.J.A.C. 12:90–5.15 (Boilers, Pressure Vessels and Refrigeration).
- (j) All parts of liquefied petroleum gas systems not specifically provided for in this chapter shall be designed and constructed to provide a reasonable degree of safety.

(k) When liquefied petroleum gas equipment is to be abandoned, the user/owner shall comply with the provisions of Section F 3005, Abandonment of Equipment, of the New Jersey State Fire Prevention Code.

Amended by R.1990 d.436, effective September 4, 1990.

See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Recodified from N.J.A.C. 12:200-1.8. Prior N.J.A.C. 12:200-1.3 was "Scope," which was recodified as N.J.A.C. 12:200-1.1.

Deleted old (j) and (k) regarding specific containers and distance requirements, recodifying old (l) as new (j) and adding new (k). In (e), deleted reference to systems utilizing containers of over 30 pounds product capacity and added "at a dispensing or distributing point."

12:200–1.4 Reporting emergency situations

- (a) All LP-Gas installations exceeding 250 gallons individual or aggregate water capacity shall be provided with a marker plate or sign indicating who should be called in the event of an emergency involving the LP-Gas installation. The marker or sign shall include the following:
 - 1. The name of the LP-Gas Supplier, plant installer, owner or operator who will respond to the emergency.
 - 2. That person's telephone number.
- (b) The LP-Gas supplier, plant installer, owner or operator shall respond when notified to all LP-Gas emergencies occurring at his installations and shall maintain a 24-hour phone service.

Recodified from N.J.A.C. 12:200-1.9 by R.1990 d.436, effective September 4, 1990.

See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Prior N.J.A.C. 12:200-1.4 was "Effective Date."

12:200-1.5 Reporting of fires, explosions or accidents

Whenever there is a fire or explosion or accident involving serious injury or loss of life to the public from liquefied petroleum gas, the Commissioner shall be notified by the user/owner before the end of the first working day following the accident.

Recodified from N.J.A.C. 12:200-1.10 by R.1990 d.436, effective September 4, 1990.

See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Prior N.J.A.C. 12:200-1.5 was "Repeal of prior chapters."

12:200-1.6 (Reserved)

Repealed by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Section was "Validity."

12:200-1.7 (Reserved)

Repealed by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Section "Existing installations" was recodified to 1.2.

12:200-1.8 (Reserved)

Repealed by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Section "Compliance" was recodified to 1.3.

12:200-1.9 (Reserved)

Repealed by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Section "Reporting emergency situations" recodified to 1.4.

12:200-1.10 (Reserved)

Repealed by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Section "Reporting of fires, explosions or accidents" was recodified to 1.5.

SUBCHAPTER 2. DEFINITIONS

12:200-2.1 **Definitions**

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise.

"Act" means Liquefied Petroleum Gas Act, N.J.S.A. 21:1B-1 et seq.

"API" means American Petroleum Institute.

"Approved" means acceptable to the commissioner. Any product certified, or classified, or labeled, or listed by a nationally recognized testing agency may be deemed to be acceptable, unless specifically banned by order of the commissioner.

"ASME" means American Society of Mechanical Engineers.

"Bulk plant" means intermediate establishment or point of storage and distribution from which liquefied petroleum gas is distributed to retail dealers and consumers, as distinguished from a terminal or refinery.

"Commissioner" means the Commissioner of Labor of the State of New Jersey or his or her authorized representative.

"Container" means any vessel including cylinders, tanks, portable tanks and cargo tanks used for storing liquefied petroleum gas.

"Cylinder" means a container having a capacity not exceeding 1,000 pounds of water.

"Dispensing device" or "dispenser" means a device normally used to transfer and measure liquefied petroleum gas for engine fuel into a fuel container, serving the same purpose for a liquefied petroleum gas service station as that served by a gasoline dispenser in a gasoline service station.

"Distributing plant" means a facility, the primary purpose of which is the distribution of gas, and which receives liquefied petroleum gas in tank car, truck transport or truck lots, distributing this gas to the end user by portable container (package) delivery, by tank truck or through gas piping. Such plants have bulk storage (2,000 gallons (7.6 cubic meters (m³)) water capacity or more) and usually have container filling and truck loading facilities on the premises. So-called "bulk plants" are considered as being in this category. Normally no persons other than the plant management or plant employees have access to these facilities.

"Distributing point" means a facility, other than a distributing plant or industrial plant, which normally receives gas by tank truck, and which fills small containers or the engine fuel tanks of motor vehicles on the premises. Any such facility having liquefied petroleum gas storage of 100 gallons (0.4 cubic meters (m³)) or more water capacity, and to which persons other than the owner of the facility or his or her employees have access, is considered to be a distributing point. A liquefied petroleum gas service station is one type of distributing point.

"Gallon" means U.S. standard gallon.

"Hazardous material" means any substance defined as a flammable or combustible liquid in accordance with the Flammable or Combustible Liquids Code, NFPA No. 30–1987, or a material classified by Hazardous Material Regulations, 49 CFR Parts 171 through 177, as a flammable solid, liquid or gas.

"Important building" means a building that can be important for its replacement value, or its importance by virtue of human occupancy or for the building's effect on fire control activities by emergency handling groups.

"Installation" means a liquefied petroleum gas system.

"Line of adjoining property" means:

- 1. The near side of adjacent real estate not owned or possessed; or
- 2. The far side of adjacent real estate not owned or possessed when the real estate cannot be built upon, namely, bodies of water, such as rivers or lakes; properties owned by utilities used for transmission or transport; or easements duly recorded or documented.

"Liquefied petroleum gas" means any material which is composed predominantly of any of the following hydrocarbons, or mixtures of the same: propane, propylene, butanes (normal or isobutane), and butylenes.

"LP-Gas system" means an assembly of one or more containers with a means of conveying LP-Gas from the container(s) to dispensing or consuming devices (either continuously or intermittently) and which incorporates components intended to achieve control of quantity, flow, or pressure in the liquid or vapor state.

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"Nationally recognized testing agency" means a laboratory, such as the Underwriters' Laboratories, Inc., American Gas Association Laboratories, or the Factory Mutual Engineering Corporation or any similar testing organization acceptable to the commissioner.

"NFPA" means National Fire Protection Association.

"N.J.A.C." means the New Jersey Administrative Code.

"N.J.S.A." means the New Jersey Statutes Annotated.

"Office of Boiler and Pressure Vessel Compliance" means the Office of Boiler and Pressure Vessel Compliance, New Jersey Department of Labor, CN 392, Trenton, N.J. 08625–0392.

"Office of Safety Compliance" means the Office of Safety Compliance, New Jersey Department of Labor, CN 386, Trenton, N.J. 08625–0386.

"Person" means an individual, firm, association or corporation.

"Plan filing" means delivery in person or by mail of application, drawings and other related data to the Office of Safety Compliance for review or deposit in its record.

"Portable container" means a USDOT or ASME container of not more than 1,000 pounds water capacity.

"Professional engineer" means a person licensed to practice professional engineering in New Jersey by the New Jersey Board of Professional Engineers and Land Surveyors.

"Property line" means the line of adjoining property or the near side of any public way.

"Public way" means a government owned thoroughfare, such as a street or highway, designed for public use by lawful procedure.

"Qualified person" means a person selected by an employer and trained to perform a specific task or duty involving LP-Gas, who has the degree of competence necessary to accomplish the work in a safe manner.

"Referenced standard" means N.J.A.C. 12:200-3.1(a), or 12:200-4.1(a), or 12:200-5.1(a) as applicable.

"Residential use group occupancy" means all buildings and structures or parts thereof in which families or households live or in which sleeping accommodations are provided for individuals with or without dining facilities excluding those occupancies that are classified as institutional buildings.

"Serious injury" means a hurt to a person which required treatment by a doctor, such as a fracture, or a condition requiring admittance to a hospital for at least 24 hours. "Tank" means a container of more than 1,000 pounds water capacity used for the storage or utilization of liquefied petroleum gas.

"USDOT" means the United States Department of Transportation.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Deleted definitions for "API-ASME," "BOCA," and "shall," and added definitions: "API," "Dispensing device," "Distributing plant," "Distributing point," "Important building," "NFPA." Added "portable tanks and cargo tanks" to definition of "container."

SUBCHAPTER 3. NFPA NO. 58 SYSTEMS

12:200-3.1 Standards adopted by reference

- (a) The standards prescribed by Liquefied Petroleum Gases, NFPA No. 58–1987, are adopted as health and safety standards and shall apply according to their provisions, except that:
 - 1. Subsections 1–2.2 and 1–2.3, Sections 1.5 and 3.6, and Chapter 6 shall not apply.
- (b) Each person engaged in liquefied petroleum gas operations shall protect the public by complying with the standards prescribed by subsection (a) of this section.
- (c) Only technical standards relating to public health and safety are adopted by any incorporation by reference as prescribed in subsection (a) of this section. Other standards relating to administration and reporting procedures are not adopted. Compliance with administrative and reporting standards shall be achieved by communication with the appropriate officials of the Office of Safety Compliance.
- (d) Where the term "line of adjoining property which may be built upon" is used in Liquefied Petroleum Gases, NFPA No. 58–1989, it shall be understood to mean "the property line" as defined in N.J.A.C. 12:200–2.1.
- (e) Buildings or structures housing liquefied petroleum gas distribution facilities and foundations for containers of over 2,000 gallons water capacity shall be constructed in accordance with the provisions of the New Jersey Uniform Construction Code.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

In (d): deleted (d)1-3 referring to BOCA codes. Added new (e).

12:200-3.2 Container markings

(a) Containers of 100 pounds product capacity or more shall be legibly marked "FLAMMABLE GAS" and the name of the gas to indicate contents such as "FLAMMABLE GAS—PROPANE" or "FLAMMABLE GAS—BUTANE", except as provided in (b) below. Compliance with the marking requirements of Title 49 of the Code of Federal Regulations shall meet this provision.

(b) A company identification system for marking containers which is approved by the Commissioner shall be acceptable in lieu of compliance with (a) above at processing plants.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

In (a): revised text from "125 gallons water" to "100 pounds product" regarding container capacity. Added Federal Register citation. In (b): revised text, adding reference to marking containers.

12:200-3.3 Container storage

- (a) Containers shall be installed outside of buildings, except as provided in N.J.A.C. 12:200–3.1(a), whether of the portable type replaced on a cylinder exchange basis or permanently installed and refilled at the installation.
- (b) Containers installed outside of buildings shall be located with regard to property lines other than public ways, important buildings, or bulk storage of hazardous materials in accordance with Table 3–2.2.2 of Liquefied Petroleum Gases, NFPA No. 58–1989.
 - 1. The term "buildings" as used in this subsection shall not be construed to include the buildings described in paragraph 3–2.2.5 of the referenced standard.
 - 2. The term "hazardous materials" as used in this subsection shall recognize the specific requirements of the specific hazardous materials described in paragraph 3-2.2.6(e) and (f) of the referenced standard.
- (c) Containers installed outside of buildings shall be located with regard to the near side of a public way in accordance with the schedule for aboveground containers of Table 3-1 of Liquefied Petroleum Gases, NFPA No. 58-1979, as provided below:
 - 1. For containers of 30,000 gallons water capacity or less a distance of at least 50 percent of said schedule;
 - 2. For containers of over 30,000 gallons water capacity a distance of at least 100 percent of said schedule.
- (d) Existing containers, installed prior to the effective date of these rules, need not comply with the distances provided in subsection (b) and (c) of this section provided:
 - 1. The containers were in conformance with the applicable chapter of the N.J.A.C. in effect at the time of installation; and
 - 2. The containers as so located do not constitute a serious and substantial threat to the health and safety of the public.
- (e) Installations of aboveground containers of 90,000 gallons individual or aggregate water capacity or more that present a serious exposure hazard shall be protected by one or more of the following: distances at least 50 percent greater than the schedule for aboveground containers of Table 3–2.2.2 of Liquefied Petroleum Gases, NFPA No.

- 58-1989, water spray protection, fixed monitors, or insulation.
- (f) If more than six containers, each of which is of 2,000 gallons water capacity or more, are used in a single installation, the containers shall be separated into batteries of not more than six containers with batteries separated from each other by the distances required for the schedule for mounded or underground containers of Table 3–2.2.2 of Liquefied Petroleum Gases, NFPA No. 58–1989.
- (g) When the required distance from a property line to an LP-Gas container cannot be obtained, the commissioner may approve a lesser distance if some other approved means of protection is provided for the system and reasonable protection for the health and safety of the public is maintained.
- (h) In case of storage in heavily populated areas or congested areas, or near places of public assembly, the commissioner shall determine restrictions of individual tank capacity, total storage, distance to property lines, and other reasonable protective measures.
- (i) Where there is a possibility of damage to storage containers from motor vehicles or other heavy objects, protection against such damage shall be provided by substantial bumper guards which are, as a minimum, four-inch diameter schedule 40 concrete filled steel pipe properly imbedded in concrete on a maximum of four-feet six-inch centers, or equivalent.
- (j) The tops of storage containers shall be in the same horizontal plane, when the containers are interconnected by liquid piping.
- (k) Storage areas having containers exceeding 100 pounds product water capacity shall be posted with adequate "NO SMOKING" and "FLAMMABLE GAS" signs legibly marked. The "FLAMMABLE GAS" sign shall be marked "FLAMMABLE GAS" and the name of the gas to indicate the contents such as "FLAMMABLE GAS-PROPANE" or "FLAMMABLE GAS-BUTANE".
- (1) Storage containers shall not be placed under an electric power service transmitting voltage in excess of 240 volts or within six feet of a line projected vertically from any edge of the container.
- (m) Cargo tank vehicles and tank cars shall not be used as a permanent storage facility.
- (n) Aboveground containers exceeding 2,000 gallons individual water capacity shall be oriented so that their longitudinal axes do not point toward other LP-Gas containers within that installation.
- (o) Dead trees or dead branches overhanging containers that can fall and dislocate a container from its piping shall be removed.

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12:200-3.3 DEPT, OF LABOR

- (p) Containers proposed for mounding or underground installation shall be provided with cathodic protection in addition to a suitable coating for corrosion protection.
 - 1. Cathodic protection will not be required if a professional engineer certifies in writing to the Department that based on his or her soil investigation such protection is unnecessary.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Stylistic revisions throughout text. In (i), added "... substantial bumper guards ... or equivalent" to text. In (k), revised "125 gallons aggregate water" to "100 pounds product" capacity. Added new (p).

Case Notes

Township could not determine safety of land use for liquid propane gas storage following determination by Commissioner of Labor and Industry. (citing former N.J.A.C. 12:200–5.8). Scheff v. Tp. of Maple Shade, 149 N.J.Super. 448, 374 A.2d 43 (App.Div.1977), certification denied 75 N.J. 13, 379 A.2d 244.

12:200-3.4 Distributing points, distributing plants and industrial plants

- (a) This section shall apply to the following:
 - 1. Distributing points of any capacity; or
 - 2. Distributing plants of any capacity; or
- 3. Industrial plants of 2,000 gallons aggregate water capacity or more.
- (b) If loading or unloading is normally done during other than day-light hours, adequate lights shall be provided to illuminate storage containers, control valves and other LP-Gas equipment.
- (c) Suitable roadways or means of access for extinguishing equipment, such as wheeled extinguishers or fire department apparatus shall be provided.
- (d) The LP-Gas system shall be enclosed within an industrial type fence at least six feet high with at least two egress gates opening outward and remotely located from each other, or be within an approved fenced plant area and protected from tampering.
- (e) The LP-Gas system shall be protected against vehicle damage with substantial bumper guards, where necessary. Bumper guards shall be, as a minimum, four-inch diameter schedule 40 concrete filled steel pipe properly imbedded in concrete on a maximum of four-feet six-inch centers, or equivalent.
- (f) The storage, loading, unloading, cylinder filling areas, and other strategic points shall be adequately posted in accordance with N.J.A.C. 12:200–3.3(k).

- (g) Approved extinguishers of adequate capacity of the carbon dioxide or dry chemical type shall be provided at strategic locations, such as storage sites, unloading and loading racks, filling or charging locations, pump, compressor and vaporizer locations.
- (h) The commissioner may require reasonable fire protection facilities for LP-Gas installations exceeding 4,000 gallons aggregate water capacity.
- (i) The point of connection of an unmounted portable container being filled (point of transfer) shall be not less than five feet from the dispensing unit or a storage container of 2,000 gallons water capacity or less.
 - 1. If weather protection for a scale is to be provided, such protection shall be constructed of non-combustible material except that the roofing material may be transparent corrugated plastic.
- (j) Liquefied petroleum gas dispensers shall not be located on the same island as a Class I liquid dispenser.
- (k) A pump stop-start switch at a distributing point shall be located inside the fence enclosure near the point of transfer.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

In (e): added text regarding bumper guards. Added new (i)1 and (j)-(k).

12:200-3.5 Standby and peak sharing plants

- (a) In any system requiring venting of LP-Gas or LP-Gas-air-mixtures, the gases shall be flared or disposed of in a manner approved by the commissioner.
- (b) A flare stack shall be provided at least 25 feet away from hazardous locations such as storage, loading or unloading and filling areas.
- (c) The flare shall have a separate gas pilot line with spark ignited burner.
- (d) A flash back preventer shall be installed in the flare line or stack.
- (e) These systems shall be designed in accordance with safe operating, inspection and maintenance procedures.
- (f) LP-Gas standby systems shall be designed to maintain the required Btu valve of the gas-air mixture within the operating limitations of the system.
- (g) The LP-Gas system capacity turn down ratio shall be such that no prolonged burning at the flare stack is necessary.

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- (h) Standby systems shall be protected by safety devices and alarms that will shut down the system and notify plant personnel if loss of pressure or overpressure occurs in the mixed gas line or in either the gas or air line.
- (i) Propane shall not be substituted for butane nor butane for propane in any standby or peak sharing system unless the system was designed for the substituting gas and has the approval of the commissioner.
- (j) Plant operating personnel shall be instructed in procedures for safe operation and emergency shut down.

SUBCHAPTER 4. NFPA NO. 59 SYSTEMS

12:200-4.1 Standards adopted by reference

- (a) The standards prescribed by Liquefied Petroleum Gases at Utility Gas Plants, NFPA No. 59–1989, are adopted as health and safety standards and shall apply according to their provisions.
- (b) Each person engaged in handling liquefied petroleum gas at utility gas plants shall protect the public by complying with the standards prescribed by subsection (a) of this section.
- (c) Only technical standards relating to public health and safety are adopted by an incorporation by reference as prescribed in subsection (a) of this section. Other standards relating to administrative and reporting procedures are not adopted. Compliance with administrative and reporting standards shall be achieved by communication with the appropriate officials of the Office of Safety Compliance.
- (d) Where any conflict occurs between the standards prescribed in subsection (a) of this section and these rules, these rules shall prevail.
- (e) Buildings or structures housing liquefied petroleum gas distribution facilities and foundations for containers of over 2,000 gallons water capacity shall be constructed in accordance with the provisions of the New Jersey Uniform Construction Code.
- (f) Where the term "line of adjoining property which may be built upon" is used in Liquefied Petroleum Gases at Utility Gas Plants, NFPA No. 59–1989, it shall be understood to mean "the property line" as defined in N.J.A.C. 12:200–2.1.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

In (e): deleted (e)1 and 2 referring to BOCA codes, adding new text at (e). Relettered old (e)3 as new (f), updating dates and citations.

12:200-4.2 Container markings

Containers of liquefied petroleum gases at utility gas plants shall be marked in accordance with N.J.A.C. 12:200–3.2.

12:200-4.3 Container storage

- (a) Containers of liquefied petroleum gases at utility gas plants shall be located with regard to property lines other than a public way, important buildings, or bulk storage of hazardous materials in accordance with the applicable schedule of Liquefied Petroleum Gases at Utility Gas Plants, NFPA No. 59–1989.
- (b) Containers of liquefied petroleum gases at utility gas plants shall be located with regard to the near side of a public way in accordance with the applicable schedule for aboveground containers of Liquefied Petroleum Gases at Utility Gas Plants, NFPA No. 59–1989.
- (c) When the required distance from a property line to an LP-Gas container cannot be obtained, the commissioner may approve a lesser distance if some other approved means of protection is provided for the system and reasonable protection for the health and safety of the public is maintained.
- (d) In case of storage in heavily populated areas or congested areas, or near places of public assembly, the commissioner shall determine restrictions of individual tank capacity, total storage, distance to property lines, and other reasonable protective measures.
- (e) Storage areas having LP-Gas containers shall be posted with adequate "NO SMOKING" and "FLAMMABLE GAS" signs legibly marked. The "FLAMMABLE GAS" sign shall be marked "FLAMMABLE GAS" and the name of the gas to indicate the contents such as "FLAMMABLE GAS-PROPANE" or "FLAMMABLE GAS-BUTANE".
- (f) Storage containers shall not be placed under an electric power service transmitting voltage in excess of 240 volts or within six feet of a line projected vertically from any edge of the container.
- (g) Aboveground containers exceeding 2,000 gallons individual water capacity shall be oriented so that their longitudinal axes do not point toward other LP-Gas containers within that installation.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Updated dates for NFPA citations.

Case Notes

Township could not determine safety of land use for liquid propane gas storage following determination by Commissioner of Labor and Industry (citing former N.J.A.C. 12:200–3.4). Scheff v. Tp. of Maple Shade, 149 N.J.Super. 448, 374 A.2d 43 (App.Div.1977) certification denied 75 N.J. 13, 379 A.2d 244.

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12:200-4.4

12:200-4.4 Fencing

The LP-Gas system shall be enclosed within an industrial type fence at least six feet high with at least two egress gates opening outward and remotely located from each other, or be within an approved fenced plant area and protected from tampering.

12:200-4.5 Fire protection

- (a) Suitable roadways or means of access for extinguishing equipment, such as wheeled extinguishers or fire department apparatus, shall be provided.
- (b) Approved extinguishers of adequate capacity of the carbon dioxide or dry chemical type shall be provided at strategic locations, such as storage sites, unloading and loading racks, filling or charging locations, pump, compressor and vaporizer locations.
- (c) The commissioner may require reasonable fire protection facilities for LP-Gas installations exceeding 4,000 gallons aggregate water capacity.

SUBCHAPTER 5. API 2510 INSTALLATIONS

Subchapter Historical Note

Subchapter 5, API 2510 Installations, was adopted as a new rule by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Prior Subchapter 5, "Submittal of Plans or Project Data Report," was recodified as Subchapter 6.

12:200-5.1 Standards adopted by reference

- (a) The standards prescribed by API 2510–1989 Design and Construction of Liquefied Petroleum Gas (LPG) Installations are adopted as health and safety standards for the design and construction of liquefied petroleum gas (LPG) installations at marine and pipeline terminals, refineries, petrochemical plants and tank farms.
- (b) Only the technical standards relating to public health and safety of API 2510–1989 are incorporated by reference in subsection (a) above. The administrative and reporting procedures contained in API 2510–1989 are not incorporated by reference; rather, the Department has developed administrative and reporting procedures in this chapter. Questions concerning conflicts in administrative and reporting standards shall be referred to the Office of Safety Compliance.
- (c) Where any conflict occurs between the standards prescribed in (a) above and this subchapter, this subchapter shall prevail.

- (d) Buildings and structures housing liquefied petroleum gas distribution facilities and foundations for containers of over 2,000 gallons water capacity shall be constructed in accordance with the provisions of the New Jersey Uniform Construction Code.
- (e) Where the term "line of adjoining property that may be developed" is used in API 2510, it shall be understood to mean "the property line" as defined in N.J.A.C. 12:200-2.1.

Case Notes

Township could not determine safety of land use for liquid propane gas storage following determination by Commissioner of Labor and Industry. (citing former N.J.A.C. 12:200–5.8). Scheff v. Tp. of Maple Shade, 149 N.J.Super. 448, 374 A.2d 43 (App.Div.1977) certification denied 75 N.J. 13, 379 A.2d 244.

12:200-5.2 Container markings

Containers of liquefied petroleum gases at marine and pipeline terminals, refineries, petrochemical plants and tank farms shall be marked in accordance with N.J.A.C. 12:200–3.2.

12:200-5.3 Container storage

- (a) Siting of containers shall conform with section 3 of the standard referenced in API 2510-1989.
- (b) In case of storage in heavily populated areas or congested areas, or near places of public assembly, the Commissioner shall determine restrictions of individual tank capacity, total storage, distance to property lines, and other reasonable protective measures.
- (c) Storage areas having liquefied petroleum gas containers shall be posted with adequate "NO SMOKING" and "FLAMMABLE GAS" signs legibly marked. The "FLAMMABLE GAS" sign shall be marked "FLAMMABLE GAS" and the name of the gas to indicate the contents such as "FLAMMABLE GAS—PROPANE" or "FLAMMABLE GAS—BUTANE".
- (d) Storage containers shall not be placed under an electric power service transmitting voltage in excess of 240 volts or within six feet of a line projected vertically from any edge of the container.
- (e) Above-ground containers exceeding 2,000 gallons individual water capacity shall be oriented so that their longitudinal axes do not point toward other liquefied petroleum gas containers within that installation.

12:200-5.4 Fencing

The liquefied petroleum gas system shall be enclosed within an industrial type fence at least six feet high with at least two egress gates opening outward and remotely located from each other, or be within an approved fenced plant area and protected from tampering.

12:200-5.5 General

NFPA 58–1989 may be used as a standard for those areas not specifically addressed in API 2510–1989 and which do not conflict with the intent of API 2510–1989.

SUBCHAPTER 6. SUBMITTAL OF PLANS OR PROJECT DATA REPORT

12:200-6.1 Submittal of plans

- (a) When required, at least three sets of plans shall be filed with the New Jersey Department of Labor, Division of Workplace Standards, Office of Safety Compliance, CN 386, Trenton, New Jersey 08625–0386 prior to construction or installation of a proposed LP-Gas system or a substantial alteration to an existing system.
 - (b) These three sets of plans shall be filed for:
 - 1. An LP-Gas system with an aggregate water capacity of over 2,000 gallons; or
 - 2. An LP-Gas system designed to transfer liquid from one container to another;
 - 3. An LP-Gas system intended to be used at a construction site for more than six months.
- (c) Prints of drawings shall be sealed by a professional engineer and shall comply with the requirements of the State Board of Professional Engineers and Land Surveyors.
- (d) Prints or duplications of drawings and documents shall bear the embossed seal of the professional of record. Original tracings and documents with the printed seal of the professional of record shall not be acceptable on prints and copies of this material even when the seal is clear and legible. A rubber stamp seal shall not be acceptable under any condition.
- (e) Original tracings and documents may bear the required signature of the professional of record, and copies of these originals with the duplicated signature and his or her embossed seal shall be acceptable for filing. Where the prints of drawings and copies of documents do not include the duplicated signature of the professional of record, each print of drawings and the title page of documents shall bear his or her signature and his or her embossed seal.
- (f) Plans shall be titled, stating name of user, location of work by street address or description, municipality, date of drawing, drawing number, and all revisions thereto.
- (g) Plans shall be drawn to scale to produce good legibility.
- (h) Plans required by (b) above shall include the following information:

- 1. A plot plan of the area within 150 feet of the LP-Gas system to scale, or with appropriate distance indicated on the plot plan, showing on-site and off-site buildings, structures, property lines, use groups of buildings or structures, and distance from bulk quantities of hazardous materials.
- 2. Design and details of foundations or supports for all containers and equipment of an installation. The foundation drawing to include a description of the soil and allowable soil pressure.
- 3. A schematic, isometric or plan drawing of the entire system with specifications. This drawing to include all equipment, parts, piping, pumps, valves, controls, safety devices, material, instrumentation and electrical systems for both power and light necessary to evaluate the safe operation of the system.
- 4. Container outline drawings indicating its dimensions, fittings, connections, capacity, design pressure, and code under which the container is built.
- 5. Appropriate information on fire protection facilities at the site and available public fire services for systems exceeding 4,000 gallons aggregate water capacity.
- (i) When projects are of a repetitive nature, such as those involving standard components or previously approved packaged units, standard drawings may be utilized.
- (j) All drawings and documents shall include notation of any and all revisions with date of change noted.
- (k) Any specifications, design information, or data germane to the plan approval shall be made available to the Office of Safety Compliance upon written request.
- (1) Plans submitted shall be accompanied by a letter of certification or equivalent certification on the plan signed by the professional engineer of record that the plans comply with Liquefied Petroleum Gases of N.J.A.C. 12:200.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). Recodified from N.J.A.C. 12:200-5.1, with stylistic revisions.

12:200-6.2 Approval of plans

- (a) The Office of Safety Compliance shall issue a letter of plan approval, after the plans have been examined and approved.
- (b) Two copies of plans approved by the Office of Safety Compliance shall be retained by the Office of Safety Compliance for its inspection service and official records. All other copies shall be returned to the applicant or professional engineer of record.
- (c) One set of the returned plans shall be kept on the construction site for inspection service by the Office of

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Safety Compliance during the entire construction period for the system.

- (d) After erection, the Office of Safety Compliance shall make a plan compliance inspection to insure that the LP-Gas facility is erected in accordance with the plans submitted and a letter of plan compliance shall be issued to the applicant or the professional of record.
- (e) Containers shall not be filled until the approval covered in (a) and (d) above has been obtained, except that:
 - 1. The product not exceeding five percent of tank capacity may be placed in the container so that tests and adjustments may be made by the installer; or
 - 2. The container may be filled, if the Office of Safety Compliance fails to comply with (d) above within 30 days, provided proper notice has been given to said office; or
 - 3. Containers may be filled for emergency or critical use, when approved by the commissioner.
- (f) If a set of plans have been approved and construction has not begun within one year from the date of plan approval, the plan approval for that site shall be considered expired unless extended or renewed by the commissioner.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Recodified from N.J.A.C. 12:200-5.2. In (e)1: added "the product not exceeding five percent of tank capacity..." to text.

12:200-6.3 Submittal of project data report

- (a) A project data report shall be filed for all new liquefied petroleum gas installations for which plans are not required under N.J.A.C. 12:200–6.1(b), except that a project data report is not required for a system under N.J.A.C. 12:200–6.1(b) that has a capacity of 250 gallons or less individual or aggregate capacity.
 - 1. A project data report shall be submitted when a propane supplier is changed and a single storage tank dispensing system (not exceeding 1,000 gallons water capacity) is replaced to duplicate a previously State-approved unit.
- (b) The project data report required by (a) above shall be filed within 10 days of actual installation for new liquefied petroleum gas installations.
- (c) The project data report shall be filed with the New Jersey Department of Labor Division of Workplace Standards, Office of Safety Compliance, CN 386, Trenton, New Jersey 08625–0386.
- (d) The project data report shall contain the following information:
 - 1. Name of owner and user of LP-Gas facility;
 - 2. Street address of facility;

- 3. Municipality and county where facility is located;
- 4. Telephone number of user of LP-Gas facility;
- 5. Number and size of LP-Gas containers.

Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a).

Added new (a)1, with updated revisions in text.

APPENDIX A

AVAILABILITY OF STANDARDS AND PUBLICATIONS REFERRED TO IN THIS CHAPTER

A copy of each of the standards and publications referenced in this chapter is on file and may be inspected at the following office of the Division of Workplace Standards between the hours of 9:00 A.M. and 4:00 P.M. on normal working days:

State of New Jersey
Department of Labor
Division of Workplace Standards
Station Plaza Bldg. 4, Third Floor
28 Yard Avenue
Trenton, New Jersey

Copies of the referenced standards and publications may be obtained from the organizations listed below. The abbreviations preceding these standards and publications have the following meaning and are the organizations issuing the standards and publications listed.

API American Petroleum Institute 1220 L Street Northwest Washington, D.C. 20005

BOCA Building Officials and Code Administration

4051 W. Flossmoor Rd. Country Club Hills, Illinois 60477–5795

CFR Code of Federal Regulations
Copies available from:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

NFPA National Fire Protection Association Batterymarch Park Quincy, Massachusetts 02269

N.J.A.C. New Jersey Administrative Code

Copies available from:
Office of Boiler and Pressure Vessel Compliance

New Jersey Department of Labor CN 392

Trenton, N.J. 08625–0392

N.J.S.A. New Jersey Statutes Annotated Copies available from:

Office of Safety Compliance

New Jersey Department of Labor and Industry Post Office Box 709

Trenton, N.J. 08625

| USC | USC United States Code Copies available from: Occupational Safety and Health Administration | | No. and Edition NFPA No. 59-1989 | Title Liquefied Petroleum Gases at Utility Gas Plants |
|--|---|--|---|---|
| U.S. Department of Labor 1515 Broadway New York, New York 10036 No. and Edition Title | | N.J.A.C. 5:18 | New Jersey Uniform Fire Code | |
| | | N.J.A.C. 5:23 | New Jersey Uniform Construction Code | |
| | | N.J.A.C. 12:90 | Boilers, Pressure Vessels and Refrigeration | |
| BOCA—199 | - | The BOCA Basic Building Code | N.J.S.A. 21:1B-1 et seq. | |
| 29 CFR Parts 171 | | The Books Building Code | 29 USC 651 et seq. | Occupational Safety and Health Act |
| through 177 | | Hazardous Material Regulations | | |
| NFPA No. 30–1987 | | Flammable and Combustible Liquids Code | Amended by R.1990 d.436, effective September 4, 1990. See: 22 N.J.R. 1984(a), 22 N.J.R. 2744(a). | |
| NFPA No. 58-1989 | | Liquefied Petroleum Gases | Updated citations, addresses and added API to appendix. | |

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