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1984

# SAFETY RULES

Liquefied Petroleum Gas Division



RAILROAD COMMISSION  
OF TEXAS

Mack Wallace, Chairman  
Buddy Temple, Commissioner  
James E. (Jim) Nugent, Commissioner



# Safety Rules of the Liquefied Petroleum Gas Division

A manual of rules and procedures for handling and odorizing liquefied petroleum gases in Texas, including specifications for design, construction and installation of equipment used in transportation, storage and distribution.

*Docket No. 1, Revised June, 1984*



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## RAILROAD COMMISSION OF TEXAS

Mack Wallace, Chairman  
Buddy Temple, Commissioner  
James E. (Jim) Nugent, Commissioner

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**RAILROAD COMMISSION OF TEXAS**  
**LIQUEFIED PETROLEUM GAS DIVISION**

L. P. GAS DOCKET NO. 1  
# 201

IN RE: LIQUEFIED PETROLEUM GAS  
DOCKET NO. 1: GENERAL REVISION

**ORDER**

**WHEREAS**, After due notice, for the time and in the manner prescribed by law, the Railroad Commission of Texas held a hearing on September 9, 1969 to consider the application of Texas L. P. Gas Association for a general review and revision of Liquefied Petroleum Gas Docket No. 1 and to adopt certain amendments, additions, and revisions of such Docket pertaining to the handling and odorization of Liquefied Petroleum Gases and specifications for the design, construction and installation of equipment used in the transportation, storage, and dispursing (sic) of liquefied petroleum gases; and

**WHEREAS**, From the testimony adduced at said hearing, from the interested parties in attendance, and from its own review of Liquefied Petroleum Gas Docket No. 1 and the proposed changes tendered, it appears to the Commission that the rules and regulations governing the Liquefied Petroleum gas industry as adopted in said Docket No. 1 have been effective for 15 years without major revision, that the technology of the industry has developed and changed to the extent that a modernization of the rules is considered reasonably necessary to assure the use of the most efficient safety regulation to protect the public and also to facilitate industry progress, that increased safety can be made effective without stifling the industry by adoption of certain changes in the rules; and

**WHEREAS**, The Commission is of the opinion and finds that revisions, amendments, and additions to the Liquefied Petroleum Gas Docket No. 1 are necessary and proper for the safety and protection of the public, it further finds that the body of rules attached to this order and made a part of this order should be adopted as Liquefied Petroleum Gas Docket No. 1, 1970 Revision.

**NOW, THEREFORE, IT IS ORDERED** By the Railroad Commission of Texas that effective January 1, 1970 that Liquefied Petroleum Gas Docket No. 1, being the rules and regulations heretofore adopted to govern the handling and odorization of liquefied petroleum gases and specifications for design, construction, and installation of equipment used in the transportation, storage, dispursing(sic), and consumption of liquefied petroleum gases, be and it is revised, and amended to read and provide as set out in the attached compilation.

**IT IS FURTHER ORDERED** By the Railroad Commission of Texas that this cause be and the same is held open on the Docket in order to permit and for the purpose of permitting any affected party to present to the Commission, after due notice and hearing, any matter pertaining to the application of the provisions of the order here entered in this cause, and for the further purpose of enabling such party to seek through the Commission such relief as he deems he is entitled to in the premises.

Done this the 22 day of December, 1969.

RAILROAD COMMISSION OF TEXAS

/s/ Ben Ramsey, *Chairman*

/s/ Byron Tunnell, *Commissioner*

/s/ Jim C. Langdon, *Commissioner*

ATTEST:

/s/ Fred Osborne, *Secy.*

(Seal)

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support effective decision-making.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and reporting, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that data is used responsibly and ethically.

5. The fifth part of the document discusses the importance of data governance and the role of leadership in establishing a strong data culture. It emphasizes that data should be used to drive innovation and improve organizational performance.

6. The sixth part of the document provides a summary of the key findings and recommendations. It reiterates the importance of data in driving organizational success and provides actionable steps for implementation.

7. The seventh part of the document includes a list of references and sources used in the research. It provides a comprehensive overview of the literature and resources that informed the document's content.

8. The eighth part of the document contains a list of appendices and supplementary materials. These include detailed data sets, charts, and additional information that supports the main text of the document.

9. The ninth part of the document provides a list of contact information for the authors and stakeholders. It includes email addresses and phone numbers for those who may have questions or need further information.

10. The tenth part of the document is a concluding statement that expresses the authors' commitment to transparency and ongoing communication. It invites feedback and collaboration from all stakeholders to improve the document's quality and relevance.

11. The eleventh part of the document includes a list of acknowledgments. It thanks the individuals and organizations that provided support, resources, and expertise throughout the project.

12. The twelfth part of the document is a final section that provides a list of additional resources and links. It includes references to related documents, websites, and publications that may be of interest to the reader.

## GENERAL APPLICABILITY AND REQUIREMENTS

### §9.1. APPLICATION OF RULES.

The following standards are intended to apply to the design, construction, location, and operation of liquefied petroleum gas systems, equipment and appliances. These standards do not apply to marine terminals, natural gasoline plants, refineries, tank farms, gas manufacturing plants, plants engaged in processing liquefied petroleum gases, or to railroad loading racks used in connection with such establishments; provided that such standards shall apply to truck loading racks.

### §9.2 APPLICATION OF BASIC RULES.

The "Basic Rules" are rules that apply to more than one division. They are used to avoid repetition. They apply to all divisions except as indicated in each division.

### §9.3. DIVISION I

(a) Division I applies specifically to systems utilizing containers constructed in accordance with Interstate Commerce Commission or Department of Transportation specifications for use with LP gas. When Department of Transportation or I.C.C. containers are used in the manner prescribed by the Department of Transportation the rules of the Department of Transportation shall apply to their transportation and handling. All Basic Rules apply to this Division unless otherwise noted.

(b) Where Interstate Commerce Commission or Department of Transportation vessels are not used in the manner prescribed by the Department of Transportation they cease to be under the jurisdiction of the Department of Transportation. When installed and used as LP gas consumer containers, they are subject exclusively to the rules of the Railroad Commission. Where such vessels are privately owned and permanently installed, they are not operated as prescribed by the Department of Transportation.

### §9.4. DIVISION II.

Division II applies specifically to consumer systems utilizing containers constructed in accordance with the provisions of Section VIII of the A.S.M.E. Boiler and Pressure Vessel Code, Division I. All Basic Rules apply to this Division unless otherwise noted.

### §9.5. DIVISION III

Division III applies specifically to bulk storage containers used in storing gas for filling truck tanks, bottle filling plants, and other installations where gas is stored, but not used on premises. All Basic Rules apply to this Division unless otherwise noted.

### §9.6. DIVISION IV.

Division IV applies to Tank Trucks and Semi-Trailer Tanks used in the transportation and distribution of liquefied petroleum gases. All Basic Rules apply to this Division unless otherwise noted.

### §9.7. DIVISION V.

Division V applies to motor fuel and mobile fuel containers for installations and use on automobiles, trucks, buses, tractors and other construction machinery, farm tractors and other types of farm machinery. All Basic Rules apply to this Division unless otherwise noted. (*See Division XI for industrial fork lift trucks.*)

### §9.8. DIVISION VI.

Division VI applies to Vaporizers for either portable, mobile, or stationary installations. All Basic Rules apply to this Division unless otherwise noted.

#### **§9.9. DIVISION VII.**

Division VII applies to piping and piping specifications and pipe fittings, and the requirements for proper installation and protection of piping installations. All Basic Rules apply to this Division unless otherwise noted.

#### **§9.10 DIVISION VIII.**

Division VIII applies to the location, installation, and connection of approved appliances and pertinent equipment used in making appliance installations including the venting of appliances.

#### **§9.11. DIVISION IX.**

Division IX applies specifically to storage containers and dispensing devices and pertinent equipment in Bottle Filling Plants and Service Stations where Liquefied Petroleum Gas is stored and dispensed from fixed LP gas equipment. All Basic Rules apply to this Division unless otherwise noted in the Basic Rules or in this Division. Containers and pertinent equipment shall comply with the requirements as outlined herein as well as with the requirements of local regulatory bodies where the bottle filling plant and service station will be constructed. NOTE: *Dispensing equipment shall mean pumps, metering devices, and other associated facilities.*

#### **§9.12. DIVISION X.**

Division X applies to Farm Carts for the transportation and distribution of liquefied petroleum gases for farm and other non-highway use. All Basic Rules apply to this Division unless otherwise noted.

#### **§9.13. DIVISION XI.**

Division XI applies to industrial fork lift trucks and other LP gas powered vehicles and carburetion equipment designed to be used in a building or on the premises. All Basic Rules apply to this Division unless otherwise noted.

#### **§9.14. DEFINITIONS.**

When reference is made to "gas" in these standards, it shall refer to liquefied petroleum gas in either gaseous or liquid state. The term "liquefied petroleum gases" or "LPG" as used herein, shall be construed to mean and include any material which is composed predominantly of any of the following hydrocarbons, or mixture thereof: propane, propylene, butane (normal butane or isobutane) and butylenes.

The word "container" as used herein, shall be construed to mean and include any receptacle in which LPG is transported, delivered, or stored, or in which LPG is injected for utilization or consumption by or through an LPG system.

The word "appliances" as used herein, shall be construed to mean any apparatus or fixture which utilizes or consumes LPG furnished or supplied by an LPG system to which it is connected or attached.

The word "system" or "LPG system" as used herein, shall be construed to mean and include all piping, fittings, and valves, exclusive of containers and appliances, which connect one or more containers to one or more appliances which utilize or consume LPG.

The word "licensee" as used herein, shall be construed to mean and include individuals, partnerships, firms, corporations, unincorporated associations, or any other business entity which has been licensed by the LPG Division of the Railroad Commission of Texas.

#### **§9.15. LP GAS REPORT FORMS**

Under the provisions of Chapter 113, Texas Natural Resources Code, the Railroad Commission has

adopted by reference the following forms for use by the Liquefied Petroleum Gas Division. These forms are available to the public upon request directed to the LP-Gas Division in Austin.

- LPG Form No. 1. Application for License.
- LPG Form No. 3. Liquefied Petroleum Gas License.
- LPG Form No. 4. Liquefied Petroleum Gas Vehicle Identification.
- LPG Form No. 5. Manufacturer's Data Report, which shall be filed within 10 days after sale of containers by the manufacturer.
- LPG Form No. 7. Liquefied Petroleum Gas Truck Registration.
- LPG Form No. 8. Manufacturer's Report of Pressure Vessel Repair or Modification.
- LPG Form No. 15. Master or Journeyman Plumber Affidavit.
- LPG Form No. 16. Application for Examination.
- LPG Form No. 17. Report of Odorization of Liquefied Petroleum Gases, which shall be filed within 30 days following calendar quarters ending March 31, June 30, September 30, and December 31, by any persons, firms, or corporations who odorize liquefied petroleum gases.
- LPG Form No. 18. Affidavit of Lost or Destroyed License.
- LPG Form No. 18B. Affidavit of Lost or Destroyed LPG Form No. 4 Decal.
- LPG Form No. 19. Inventory of Liquefied Petroleum Gas Bulk Storage Plants.
- LPG Form No. 20. Inventory of Liquefied Petroleum Gas Service Stations and Bottle Filling Plants.
- LPG Form No. 21. Respondent's Answer (see §9.18 relating to Answer Requirements in Commission-Called Hearing.)
- LPG Form No. 996A. Certificate of Insurance, Workers' Compensation and Employers' Liability.
- LPG Form No. 996B. Affidavit in Lieu of Workers' Compensation and Employers' Liability Insurance.
- LPG Form No. 997A. Certificate of Insurance, Automobile Bodily Injury and Property Damage Liability.
- LPG Form No. 997B. Affidavit in Lieu of Automobile Bodily Injury and Property Damage Liability Insurance.
- LPG Form No. 998A. Certificate of Insurance, General Liability.
- LPG Form No. 998C. Affidavit in Lieu of Manufacturers' and Contractors' and/or Completed Operations and Products Liability Insurance.
- LPG Form No. 999. Notice of Insurance Cancellation.

#### **§9.16. EXAMINATION OF REPRESENTATIVE. [A.8]**

(a) Each applicant for a license or license renewal shall file with the division LPG Form No. 1 designating a representative, who shall be an owner or employee of the licensee and shall be directly responsible for actively supervising LP gas operations of the licensee. Sole proprietors and all members of partnerships licensed under category "E" shall be examined by the Commission.

(b) A licensee may not engage in LP gas related activities governed by Chapter 113, Texas Natural Resources Code, until its designated representative has passed the examination administered by the Commission. The Commission shall not issue or renew a license unless the designated representative has passed this examination.

(c) The licensee shall notify the Commission in writing upon termination of its representative of record and shall at the same time designate a replacement by submitting a new LPG Form No. 1.

(d) Testing must demonstrate a representative's knowledge of the applicable safety requirements and penalties in Chapter 113, Texas Natural Resources Code, and the safety rules of the Division.

(e) An application for examination (Form 16A) must be submitted to the Commission prior to the examination.

(f) A representative who does not pass the examination shall not be reexamined for a 24-hour period.

(g) The Commission will administer examinations in Austin unless an applicant demonstrates good cause for administering an examination in the field. Good cause includes, but is not limited to, severe economic hardship.

#### **§9.17. REGISTRATION OF LPG TRANSPORT AND DELIVERY UNITS. [A.9]**

(a) A licensee who has purchased, leased or obtained other rights in any LPG transport/delivery trailer(s) and/or motor vehicle(s) shall register each such unit with the LP Gas Division in the dealership's name(s) prior to the use of such unit(s) for the licensed transport or delivery of LP gas.

(b) An ultimate consumer who has purchased, leased or obtained other rights in any LPG transport/delivery trailer(s) and/or motor vehicle(s) shall register each such unit with the LP Gas Division in his (its) name(s) prior to the use of such unit(s) for the transport or delivery of LP gas on public highways.

#### **§9.18. ANSWER REQUIREMENT IN COMMISSION-CALLED HEARING. [A.3]**

(a) Filing of Answer. The Respondent/dealership in any cause of action for which Notice of Hearing has been served and which cites such dealership to be in violation of the LP Gas Code or any rule or standard promulgated by the Railroad Commission of Texas pursuant to its statutory authority shall have five days from the date Notice is received to file an answer to the charge or charges set out therein with the LP Gas Division. Filing under this section shall be deemed accomplished when an answer is posted with the United States mail before or on due date, properly addressed and stamped with sufficient postage, or at such other time as an answer is physically delivered to the LP Gas Division, whichever occurs first.

Extension of time for filing an answer shall be considered upon motion and granted for good cause where it should appear that time for filing is insufficient. Motions for postponement of hearing date will be granted for good cause where it should appear that time for filing under these rules cannot otherwise be met or where other grounds for postponement exist.

(b) Content of Answer. The answer shall contain a written statement signed by one authorized to bind the Respondent/dealership which shall admit or deny, in whole or in part, the charge or charges stated in the Notice of Hearing or shall state the reason or reasons why it can neither admit nor deny the charges against it and shall specifically state that part, including any allegation of fact made therein, which is denied where the charge or charges are disputed in part only. In the event that the Respondent denies all or part of the charge(s) contained in the Notice of Hearing, the answer shall contain a concise account of the facts which the Respondent contends will refute all or any part of the charge(s) against it. The Respondent may additionally plead in his answer as many several matters, whether of law or fact, as he may think necessary for his defense. Further, the answer shall contain a waiver of attorney where the Respondent/dealership does not choose to be represented by counsel at hearing; such waiver will not deny the Respondent the right to legal representation should the Respondent actually appear at hearing with or through an attorney. The answer shall also contain a statement of Respondent's intent to appear at hearing or, alternatively, its decision to suffer a default judgment.

(c) Amendments to Answer. The answer may be amended at any time prior to or on the date for filing such pleading and thereafter with consent of all parties or upon finding that amendment will not operate to prejudice or unduly surprise any party to the cause of action.

(d) Form of Answer. An answer made pursuant to this section may be made on LPG Form No. 21, adopted for use by the LP Gas Division and available to the public upon request directed to such division in Austin, Texas.



Alternatively, a respondent may submit the information required by subsection (b) herein on 8½" by 11" or 8½" by 14" paper, making reference to the dealership name and the docket number in the cause.

**§9.19. CHANGES IN OWNERSHIP AND/OR FORM OF DEALERSHIP [A.4]**

(a) Transfer of Dealership Outlet/Location(s) by Sale, Lease or Gift.

(1) Licensing. The purchaser, lessee, or donee of any dealership outlet or location shall apply for and be issued an LP gas license **prior to** engaging in any dealership operation which requires such a license.

(2) Notice. The purchaser, lessee, or donee of any dealership outlet or location or the authorized representative thereof shall notify the Division by certified mail of a completed transfer of such outlet or location **prior to** engaging in any operation through that outlet or location which requires an LP gas license.

(b) Other changes in Ownership

(1) Licensing. Upon the death of a sole proprietor or partner, or the dissolution of a corporation or partnership, or any change in members of a partnership, or other changes in ownership not specifically provided for elsewhere in this rule, all operations of the previously existing dealership which require an LP gas license shall cease immediately and no operation shall resume until an LP gas license is issued to the successor(s) in interest and the notice requirement of subsection (2) herein has been satisfied.

(2) Notice. An authorized representative of the previously existing dealership or of successor(s) in interest shall notify the Division by certified mail of the death of a sole proprietor or partner, or the dissolution of a partnership or corporation, or any change in partnership members, or other change in ownership not specifically provided for elsewhere in this rule.

(3) Change in Partnership Members. A change in members of a partnership occurs upon the death, withdrawal, expulsion or addition of a partner.

(c) Change in Dealership Business Form.

(1) Licensing. When a dealership converts from one business entity into a different kind of business entity, the resulting dealership must apply for and be issued a license before engaging in any operation which requires an LP gas license.

(2) Notice. A dealership's authorized representative shall notify the Division by certified mail of an accomplished change in business form before the dealership, as altered, engages in any operation requiring an LP gas license.

**§9.20. DEALERSHIP NAME CHANGE [A.7] REV. 9/82**

(a) Duty to Report. A licensee shall file the following forms, evidencing any change in the licensee's name(s), with the LP Gas Division prior to engaging, under such name(s), in operations that require an LP gas license:

- (1) an amended application for license; and
- (2) certificates of insurance and/or affidavits in lieu of insurance (where permitted by §9.24 [A.1]).

(b) Duty to Re-Register. A licensee operating under a changed name(s) shall cause the re-registration of any LP-gas transport/delivery trailer and/or motor vehicle in the changed name(s) by filing an amended LPG Form No. 7 with the Division prior to the use of any such unit in the transport or delivery of LP-gas.

## §9.21. APPLICATION FOR AN EXCEPTION TO A SAFETY RULE [A.5]

(a) Filing . Any LP-gas licensee may apply for an exception to the provisions of this chapter by filing an application for exception with the Liquefied Petroleum Gas Division.

(b) Form. The application or pleading must be typewritten on paper not to exceed 8½ by 14 inches and have an inside margin of at least one inch. Any annexed exhibits must be folded to the same size as the pleading itself. The content must be double spaced and appear on one side of the paper only.

(c) Content. The application shall contain:

(1) A reference, by section number, to the applicable section which serves as the general rule.

(2) A statement of the type of relief desired; i.e., the exception applied for and those details which may be helpful in comprehending the exact nature of the exception.

(3) A concise statement of facts which support the applicant's case for the exception; e.g., the need for the exception and the reason for it, the safety aspects of the exception, and the social and/or economic impact of the exception.

(4) A description of the acreage and/or address upon which the exception, if granted, will be located should its location be stationary. The description shall identify the site sufficiently to permit determination of property boundaries, state the ownership of such land, and state under what legal authority the applicant, if not the owner, is permitted occupancy.

(5) The name, business address, and telephone number of the applicant and of his authorized agent, if any.

(6) An original signature, in ink, by the party filing the application or by his authorized representative.

(d) Notice.

(1) The applicant shall mail a copy of the application to all interested parties on the same date on which the application is filed with or sent to the Commission.

(2) In the case of an exception requested on a stationary site, interested parties to whom the applicant must give notice shall include, but not be limited to:

(A) persons and businesses owning or occupying property adjacent to the site;

(B) the city council, if the site is within municipal limits; and

(C) the county commission, if the site is not within any municipal limits.

(3) In the case of an exception requested on a nonstationary site, interested parties to whom the applicant must give notice shall include, but not be limited to:

(A) the Texas Department of Highways and Public Transportation;

(B) the Texas Department of Public Safety; and

(C) all processed gas loading and unloading facilities utilized by applicant.

(4) In the interests of justice, the director may require an applicant to give notice to persons in addition to those listed in paragraphs (2) and (3) of this subsection if doing so will not prejudice the rights of any party.

(e) Division review. The division director or his delegate shall review the application when it is complete. If the Commission has received waivers from all interested parties as defined in subsection (d) of this section, the director may grant administratively the exception if it will neither imperil nor tend to imperil the health, welfare, or safety of the general public. If the director declines administratively to grant the exception, he shall notify the applicant of the reasons and of any specific deficiencies. The applicant may modify the application to correct the deficiencies and resubmit the application, or may request a hearing on the matter.

(f) Hearings.

(1) When held. A hearing will be held when the Commission does not receive waivers from all interested parties, or when the applicant requests one following an administrative denial.

(2) Notice.

(A) The division shall prepare a notice of hearing which shall be delivered to the applicant at such a time as will permit the applicant to give 10 days' notice prior to the date of the hearing to interested persons in the cause. A copy of the notice attached to the application shall be posted in a conspicuous place in the division's office in Austin, Texas, not less than 10 days prior to the date of hearing.

(B) The applicant shall mail copies of the notice of hearing by certified mail to all interested parties, return receipt requested, at such time that interested parties should receive copies at least 10 days prior to the date of hearing, and shall forward to the LP-Gas Division:

(i) the certified mail receipts; and

(ii) an affidavit stating that, to the best of the applicants knowledge, all interested parties have been notified as required in this subparagraph. If all interested persons have not been notified, the reason for such failure to notify shall be stated in the affidavit and the name(s) and last known address(es) of such person(s) shall be stated. The affidavit must be signed by the applicant or his authorized representative.

(3) Hearing Procedure. Hearings will be held in accordance with the requirements of the Administrative Procedure and Texas Register Act (Texas Civil Statutes, Article 6252-13a), and the general rules of practice and procedure of the Railroad Commission of Texas.

(g) Penalties. Intentional misinformation submitted by an applicant or the authorized agent of such applicant shall be punishable as set out in §91.143, Tex. Nat. Resources Code, and shall be grounds for dismissing the application with prejudice.

(h) Finding requirement. After hearing, exceptions to this chapter may be granted by the Commission when based on a determination that the grant of the exception will neither imperil or tend to imperil the health, safety, or welfare of the general public.

(i) Temporary exception. For good cause shown, the director of the LP-Gas Division may grant a temporary exception, not to exceed 30 days, to the examination requirements for representatives and operations supervisors. Good cause shall include, but not be limited to, the death of a sole proprietor or partner, or severe economic hardship. An applicant for a temporary exception must agree to comply with all applicable safety requirements and furnish the director with evidence that granting the exception will not create a safety hazard or endanger the public.

**§9.22. ORIGINAL TESTING OF OPERATIONS SUPERVISORS. [A.11]**

(a) A licensee that maintains additional outlets or locations shall designate a person as operations supervisor at each outlet or location. The operations of the licensee at the outlet or location may not continue when the operations supervisor has not passed the representative's or supervisor's examination administered by the Commission.

(b) Testing must demonstrate the operations supervisor's knowledge of the safety requirements and penalties in Chapter 113, Texas Natural Resources Code, and related safety rules of the Division.

(c) An operations supervisor who does not pass the required examination shall not be reexamined for a 24-hour period.

(d) The Commission will administer examinations in Austin unless an applicant demonstrates good cause for administering an examination in the field. Good cause includes, but is not limited to, severe economic hardship.

### **§9.23. REEXAMINATION OF OPERATIONS SUPERVISOR. [A.12]**

(a) Reexamination of the person responsible for and actively supervising operations at any licensee outlet or location shall be required five years from the date of original testing and prior to or on that date every five years thereafter and shall be a condition precedent to continued licensee operations.

(b) The substance of those tests administered pursuant to subsection (a) herein shall include any or all areas of knowledge evaluated on original testing and/or those changes in relevant laws and rules effected since supervisory qualifications have last been determined by the Commission.

(c) This rule shall become effective September 1, 1985.

### **§9.24. INSURANCE REQUIREMENTS [A.1]**

(a) Pursuant to Chapter 113, Texas Natural Resources Code, the Railroad Commission of Texas has adopted the following minimum amounts of insurance for LP-gas dealers licensed by the State of Texas. A valid certificate of insurance shall be filed with the LP-Gas Division before the Commission grants or renews a license.

(1) Category A — manufacturers or fabricators.

(A) General liability, including premises and operations coverage and products and completed operations liability coverage: \$300,000 bodily injury; \$100,000 property damage; \$300,000 aggregate; or \$300,000 combined single limits.

(B) Workers' compensation, including employers' liability.

(2) Category B — transport outfitters.

(A) General liability, including premises and operations coverage: \$25,000 bodily injury; \$10,000 property damage; \$25,000 aggregate; or \$25,000 combined single limits.

(B) Workers' compensation including employers' liability.

(3) Category C — carriers.

(A) General liability, including premises and operations coverage and products and completed operations liability coverage: \$300,000 bodily injury; \$100,000 property damage; \$300,000 aggregate; or \$300,000 combined single limits.

(B) Automobile bodily injury and property damage liability: \$100,000 bodily injury per person; \$300,000 bodily injury per occurrence; \$100,000 property damage; or \$300,000 combined single limits.

(C) Workers' compensation, including employers' liability.

(4) Category D — general installers and repairmen.

(A) General liability including premises and operations coverage: \$25,000 bodily injury; \$10,000 property damage; \$25,000 aggregate; or \$25,000 combined single limits.

(B) Workers' compensation, including employers' liability.

(5) Category E — retail and wholesale dealers.

(A) General liability including premises and operations coverage and products and completed operations liability coverage: \$300,000 bodily injury; \$100,000 property damage; \$300,000 aggregate; or \$300,000 combined single limits.

(B) Automobile bodily injury and property damage liability: \$100,000 bodily injury per person; \$300,000 bodily injury per occurrence; \$100,000 property damage; or \$300,000 combined single limits.

(C) Workers' compensation, including employers' liability

(6) Category F — bottle exchanges.

(A) General liability including premises and operations Coverage: \$25,000 bodily injury; \$10,000 property damage; \$25,000 combined single limits.

(B) Workers' compensation, including employers' liability.

(7) Category G — service station.

(A) General liability including premises and operations coverage: \$25,000 bodily injury; \$10,000 property damage; \$25,000 aggregate; or \$25,000 combined single limits.

(B) Workers' compensation, including employers' liability.

(8) Category H — bottle dealers.

(A) General liability including premises and operations coverage: \$300,000 bodily injury; \$100,000 property damage; \$300,000 aggregate; or \$300,000 combined single limits.

(B) Automobile bodily injury and property damage liability; \$100,000 bodily injury per person; \$300,000 bodily injury per occurrence; \$100,000 property damage; or \$300,000 combined single limits.

(C) Workers' compensation including employers' liability.

(9) Category I — service station and bottle exchanges.

(A) General liability including premises and operations \$25,000 bodily injury; \$10,000 property damage; \$25,000 combined single limits.

(B) Workers' compensation including employers' liability.

(10) Category J — service station and bottle dealerships.

(A) General liability including premises and operations: \$300,000 bodily injury; \$100,000 property damage; \$300,000 aggregate; or \$300,000 combined single limits.

(B) Automobile bodily injury and property damage liability: \$100,000 bodily injury per person; \$300,000 bodily injury per occurrence; \$100,000 property damage; or \$300,000 combined single limits.

(C) Workers' compensation including employers' liability.

(11) Category K — distribution system.

(A) General liability including premises and operations coverage: \$50,000 Bodily injury; \$25,000 property damage; \$50,000 aggregate; or \$50,000 combined single limits.

(B) Workers' compensation including employers' liability.

(12) Category L — carburetion.

(A) General liability including premises and operations coverage: \$25,000 bodily injury; \$10,000 property damage; \$25,000 aggregate; or \$25,000 combined single limits.

(B) Workers' compensation including employers' liability.

(b) A licensee or applicant for a license that does not employ or contemplate employing any employee in LP gas related activities may file LPG Form No. 996B in lieu of a Certificate of Workers' Compensation, including Employers' Liability Insurance. The licensee or applicant for license must file the required insurance certificate with the Division before hiring any person as a dealership employee.

(c) A Category "C", "E", "H", or "J" licensee or applicant for a license that does not operate or contemplate operating a motor vehicle equipped with a LP gas cargo tank or does not transport or contemplate transporting LP gas by vehicle in any manner may file LPG Form No. 997B in lieu of a Certificate of Automobile Bodily Injury and Property Damage Insurance, if this certificate is otherwise required. The licensee or applicant for a license must file the required insurance certificate with the Division before operating a motor vehicle equipped with an LP gas cargo tank or transporting LP gas by vehicle in any manner.

(d) A Category "A", "C", or "E" licensee or applicant for a license that does not engage in or contemplate engaging in any LP gas operations that would be covered by Completed Operations and Products Liability Insurance may file LPG Form No. 998C in lieu of a Certificate of Completed Operations and Products Liability Insurance. The licensee or applicant for a license must file the required insurance certificate with the Division before engaging in any operations that require Completed Operations and Products Liability Insurance.

(e) A licensee or applicant for a license that does not engage in or contemplate engaging in any operations that would be covered by General Liability Insurance may file LPG Form No. 998C in lieu of a Certificate of General Liability Insurance. The licensee or applicant for a license must file the required insurance certificate with the Division before engaging in any operations that require General Liability Insurance.

#### **§9.25. LIMITATION/AVOIDANCE OF LICENSEE LIABILITY. [A. 10]**

(a) An LP Gas licensee may not limit or avoid its liability or that of its insurer for damages proximately resulting from any negligent act or acts of the licensee.

(b) An attempt to limit or avoid liability before the negligent act or acts, through indemnity clauses or otherwise, shall be null and void.

(c) This rule does not apply to negotiations and/or settlements made subsequent to a licensee's negligent act or acts.

(d) To the extent that any damage, occurring during or subsequent to any of the following acts, does not proximately result from any negligent act of the licensee, the licensee may limit liability based upon: (i) unauthorized, unsafe, or improper application of LP Gas or any LP Gas system or equipment by any user or other person, (ii) any use or operation of LP Gas or any LP Gas system or equipment contrary to specific representations made by any user or other person to an LP Gas licensee during or preceding installation or servicing of such LP Gas system or equipment and relied upon by such LP Gas licensee in selecting, designing, installing, or servicing such system or equipment, or (iii) any modification, change, installation, alteration, tampering, or other action by any unlicensed person, to or upon any LP Gas system or equipment.

#### **§9.26. EXAMINATION OF EMPLOYEES [A. 13] REV. 3/82**

(a) An LP gas licensee may not employ any person as a service and installation person of LP gas systems or motor fuel systems, delivery or transport truck driver, bottle filler, or motor or mobile fuel filler, unless the employee has passed an examination prepared and administered by the Commission to determine competency to perform safely the duties required in handling or dealing with LP gas in the capacity in which the person is to be employed. Any employee applying for the delivery truck driver examination must also submit to and pass the service and installation examination for LP gas systems.

(b) Notwithstanding the provisions of subsection (a) of this section, a trainee employee is exempt from the examination requirement for 45-days. LPG Form 16 shall be filed with the Commission so that an examination may be scheduled. An LP gas licensee who employs a trainee employee shall provide direct supervision of the trainee. Direct supervision shall be conducted by a person who has previously passed the examination qualifying him for the same duties as the trainee will perform. The licensee may be required to provide the Commission with the Social Security number of all examined employees.

(c) A trainee who does not pass the examination shall immediately cease all LP gas activities pertaining to the examination and shall not be reexamined for a 48-hour period.

(d) The Commission will administer examinations in Austin unless an applicant demonstrates good cause for administering an examination in the field. Good cause includes, but is not limited to, severe economic hardship.

(e) A licensee shall notify the Commission when a previously qualified employee is hired. Notification will include the employee's name as recorded on the current driver's license, Social Security number, previous licensee-employer, and LP gas related work to be performed.

#### **§9.27. EXAMINATION FEES. [A.14]**

Each applicant shall pay to the Commission in advance a nonrefundable examination fee for each required examination in the following amounts:

(1) Representative's Examination

(A) Categories "A" and "E"--\$50 each

(B) Categories "B" and "C"--\$25 each

(C) All other categories in Section 113.082, Texas Natural Resources Code--\$10 each

(2) Supervisor's Examination

(A) Initial examination--No charge

(B) Failure examination--\$50

(3) Employee's Examination

(A) Initial examination--No charge

(B) Failure examination--\$15

#### **§9.28. EXEMPTION OF MASTER OR JOURNEYMAN PLUMBER. [A.15]**

(a) Master or journeyman plumbers licensed by the Texas State Board of Plumbing Examiners shall be exempt from all Category "D" licensing requirements, except as provided in (b) below, if the plumber:

(1) actually performs or provides continuous on-site supervision of LP gas installations; and

(2) complies with the Safety Rules of the LP Gas Division; and

(3) files LPG Form No. 15 with the LP Gas Division, stating that the plumber is a duly licensed master or journeyman plumber and has read the Safety Rules of the LP Gas Division and will comply with these rules when installing, repairing, altering, or testing any LP gas system or LP gas appliances. This statement shall be renewed annually and must be on file prior to performing any LP gas installation, repair, or alteration activity.

(b) This exemption does not permit a master or journeyman plumber licensed by the Texas State Board of Plumbing Examiners to sell, service or install containers without an LP gas license.

#### **§9.29. SERVICE, INSTALLATION, AND REPAIR OF LP-GAS APPLIANCES. [A.16]**

The service and repair of an LP gas appliance not required by the manufacturer to be vented to the outside atmosphere is exempt from Category "D" and "E" licensing. The installation of these unvented appliances to LP gas systems by means of LP gas appliance connectors is also exempt from Category "D" and "E" licensing.

#### **§9.30. SUBMISSION OF DRAWINGS, PLANS, REPORTS AND SPECIFICATIONS. NEW 3/82**

The division director or his delegate shall examine all drawings, plans, reports, and specifications required by statute or Commission regulation to be submitted for approval. The director shall determine whether the design, manufacture, construction, or use of the depicted item, system, operation,

procedure, laboratory, or installation complies with division rules. The director shall also determine whether the subject of the submission poses a threat to the health, welfare, and safety of the general public. If the director declines administratively to approve the submission, he shall notify the applicant in writing of the deficiencies. The applicant may modify the submission and resubmit it for approval, or may request a hearing on the matter in accordance with the general rules of practice and procedure of the Commission. The subject of the submission shall not be operated or used in LP gas service in this state until approved by the director or by the Commission following a hearing.



## BASIC RULES

### §9.31. ODORIZING GASES [B.1]

(a) From and after the effective date of this order each person, firm, corporation, or association, including municipal corporations engaged in the business of handling, storing, selling, or distributing liquefied petroleum gas for private or commercial uses, or supplying the same by pipe lines or other means to any public building or buildings or to the general public shall continuously odorize such gas by means of a malodorant agent to be introduced into the gas in either its gaseous or liquid state so as to indicate by a distinctive odor the presence of gas when such gas is present in air in concentrations of not over one-half of the one percent by volume. Such odor must be readily perceptible to normal or average olfactory senses of a person coming from fresh ungasified air.

(b) It is not intended by these rules to require the odorization of liquefied petroleum gas used, or to be used in natural gasoline extraction plants, recycling plants, chemical plants, carbon black plants, or liquefied petroleum gas used in industrial plants, or pipe lines connected thereto. Provided, however, in such chemical plants, carbon black plants, natural gasoline extraction plants, recycling plants, and industrial plants any liquefied petroleum gas used or to be used, for space heating, domestic water heating, cooking and/or liquefied petroleum gas used primarily for furnishing heat for office or living quarters, shall be odorized.

(c) The malodorant agent, when present in liquefied petroleum gases in such concentration as to meet the requirements of (a) above, shall be harmless and non-toxic and shall be non-corrosive to steel, iron, brass, bronze, synthetic rubber, or to leather, and shall not be soluble in water to a greater extent than two and one-half parts by weight, of malodorant to one hundred parts, by weight, of water at 60° F.

(d) The products of combustion from the malodorant agent when present in liquefied petroleum gases, in such concentrations as to meet the requirements of (a) above, shall be non-toxic to a person breathing air containing these products of combustion and shall not be corrosive or harmful to the materials with which such products of combustion would ordinarily come in contact in places where gas is burned.

(e) The odorization requirement of (a) shall be considered to be met by the use of 1.0 pounds of ethyl mercaptan or 1.4 pounds of amyl mercaptan per 10,000 gallons of LP gas. However, this listing of odorants and quantities shall not exclude the use of other odorants that meet the odorization requirement of (a).

### §9.32. REPORT OF ODORIZATION. [B.2]

Each person, firm or corporation who odorizes liquefied petroleum gas is responsible for completing and filing LPG Form No. 17 within 30 days after the end of the calendar quarter covered by the report. This report shall show, in addition to the other information required, the specific type of odorant used, or the trade name, the amount of odorant used and the number of gallons of gas odorized.

### §9.33. AUTHORIZED CONTAINERS. [TEMPORARY] [B.3]

(a) A.S.M.E. Containers. Any A.S.M.E. container identified as such by manufacturer's nameplate is authorized for use in accordance with applicable rules of the Liquefied Petroleum Gas Division upon submission of filings required by Subsection (b) herein.

(b) Manufacturer's Data Report/Plans and Specifications.

(1) Submission and Content. Manufacturers of Liquefied Petroleum Gas containers or unfired pressure vessels shall submit to the Railroad Commission a manufacturer's data report and plans and specifications for the fabrication, assembly and installation (where applicable) of each such container or vessel. The manufacturer's data report and the plans and specifications shall be complete in all details necessary to fully describe and illustrate, respectively, the fabrication, assembly and (if applicable) the installation thereof.

(2) Certification by Manufacturer. The manufacturer of a Liquefied Petroleum Gas container or unfired pressure vessel used to transport, store or dispense liquefied petroleum gas shall certify on

the plans and specifications thereof that, at the time of manufacture, the plans and specifications met or exceeded the requirements of the current edition of the American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, Division I, Section VIII and the rules of the Commission pertaining thereto.

(3) Exceptions.

A. Manufacturer's Data Report Available. Where plans and specifications for a container presently in existence are unavailable or do not meet the requirements of Subsection (b) (1) or (b) (2) herein, that container is authorized for use in accordance with applicable rules upon submission of a manufacturer's data report which meets the requirements of Subsection (b) (1).

B. Certification by Testing Laboratory.

(i) Manufacturer's Data Report Unavailable. Where the manufacturer's data report is unavailable or does not meet the requirements of subsection (b) (1) herein, a recognized testing laboratory registered with the Railroad Commission of Texas shall test the affected container or vessel and, prior to its use in the transport or storage of LP gas in the State of Texas (other than that which may be incidental to such testing), the laboratory shall submit its certification to the Railroad Commission that the container or vessel is safe for LP gas service.

(ii) Manner of Testing. As necessary, in order to determine the safety of the container or vessel for LP gas service, testing shall be by one or more A.S.M.E. recognized testing methods.

**§9.34. EXAMINATION OF CONTAINERS. [B.4]**

At the request of the Commission, when in the opinion of the Commission such action is necessary, containers and assemblies shall be examined by a recognized testing laboratory equipped for and experienced in the testing of liquefied petroleum gas containers and equipment and a comprehensive report on the findings of such testing laboratory shall be submitted to the Railroad Commission for their consideration.

**§9.35. SALE OF UNASSEMBLED CONTAINERS. [B.5]**

No unassembled liquefied petroleum gas vessel shall be sold for use in the State of Texas unless the seller has determined that the purchaser has obtained approval, from the Railroad Commission, of the plans and specifications covering assembly of such vessels.

**§9.36. APPROVAL OF VALVES, FITTINGS, AND EQUIPMENT [B.6]**

All valves, fittings and equipment (such as vaporizers, carburetors, relief valves, excess flow valves, regulators, cut-off valves, etc.) which are required in the complete assembly, shall be approved by the Railroad Commission. Applications for approval shall be accompanied by such drawings, specifications, laboratory test reports, and other data as the Commission may require.

**§9.37. REQUIREMENTS FOR CONSTRUCTION OF CONTAINERS. [B.7]**

All containers used for storing and/or dispensing liquefied petroleum gas in the State of Texas, except containers manufactured and maintained in accordance with the requirements of the Department of Transportation, shall be fabricated and marked in strict accordance with Division I, Section VIII of the edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code in effect at the time of fabrication. A copy of Section VIII of the A.S.M.E. Boiler and Pressure Vessel Code, Division I, is on file in the office of the L.P. Gas Division of the Railroad Commission of Texas at Austin, Texas. *EXCEPTION: conformity with Par. UG-125 to UG-134 inclusive of this Code shall not be required.*

**§9.38. INSPECTION OF CONTAINERS. [B.8]**

All containers except I.C.C. or D.O.T. containers shall be inspected during fabrication in accordance

with the provisions of Division I, Section VIII of the edition of the A.S.M.E. Boiler and Pressure Vessel Code in effect at the time of fabrication.

#### **§9.39. QUALIFICATION OF INSPECTORS. [B.9]**

All persons inspecting liquefied petroleum gas vessels during the process of fabrication shall be qualified in accordance with the provisions set forth in Division I, Section VIII of the A.S.M.E. Boiler and Pressure Vessel Code in effect at the time of inspection. Such qualified inspectors shall have been approved by the Railroad Commission of Texas.

#### **§9.40. MANUFACTURER'S NAMEPLATES AND MARKINGS ON ASME CONTAINERS. [B.10] NEW RULE**

(a) No American Society of Mechanical Engineers (ASME) container manufactured after September 1, 1984, and embodied in Divisions II, III, IV, V, VI, IX, X, and XI shall be used in the State of Texas unless such container has a stainless steel nameplate permanently attached to the container by continuous fusion welding around the perimeter of the nameplate.

(b) Nameplate thickness shall be sufficient to resist distortion due to the application of markings and fusion welding.

(c) Container nameplates shall be stamped or etched with the following information in characters not less than 5/32 inch high.

(1) the mark or symbol approved by the ASME indicating compliance with the provisions of the ASME Pressure Vessel Code;

(2) the name and address of the manufacturer;

(3) the capacity of the container in water gallons;

(4) the maximum allowable working pressure of the container in pounds per square in (PSI);

(5) the wording "This container shall not contain a product having a vapor pressure in excess of ----- pounds per square inch at a temperature of 100°F.;

(6) the thickness of the material used in both shell and head;

(7) the overall length of the container, the outside diameter of the container, and the dish radius of the heads;

(8) the serial number of the container;

(9) the date of manufacture; and

(10) service for which the container is designed (i.e., underground or aboveground).

(d) Nameplates shall be attached to the containers so as to remain visible after installation of the containers.

(e) In addition to a container nameplate, underground containers shall have a system nameplate permanently attached to the system in such position as to be readily accessible for inspection when the system is buried.

#### **§9.41. MARKINGS ON UNDERGROUND CONTAINERS. [B.11]**

*(Repealed April, 1984)*

#### **§9.42. SAFETY RELIEF VALVES. [B.12] REV. 3/83**

(a) Every liquefied petroleum gas container shall be equipped with one or more spring loaded relief valves having a suitable discharge capacity. The use of fusible plugs or frangible discs is prohibited.

(b) The discharge capacity of safety relief valves installed on A.S.M.E. Code containers for use with LP-gas shall be in accordance with the provisions of §9.321, Appendix A. Safety relief valves installed on

D.O.T. containers for use with LP-gas shall have a discharge capacity in accordance with the requirements of the Department of Transportation.

**§9.43. SETTING OF RELIEF VALVES [B.13] REV. 3/83**

(a) All safety relief valves installed on A.S.M.E. Code containers for use with LP-gas shall have a marked set pressure equal to the design working pressure of the container, except as noted in §9.51 (b). This does not apply to relief valves installed prior to the effective date of this rule, but does apply to replacements of relief valves made after the effective date.

(b) Safety relief valves installed on D.O.T. containers for use with LP gas shall be set to start to a discharge in accordance with the provisions of the Department of Transportation Specifications under which such vessels are constructed.

(c) Safety relief valves installed on A.S.M.E. Code containers for use with LP-gas shall have a discharge capacity rating not less than the rates shown in §9.321, Appendix A.

**§9.44. CONSTRUCTION AND MARKING OF SAFETY RELIEF VALVES. [B.14] REV. 3/83**

Safety relief valves shall be constructed and marked in accordance with applicable requirements of UL standard 132, "Standards On Safety Relief Valves For Anhydrous Ammonia and LP—Gas" (adopted by reference by this section), or other equivalent applicable standards. Relief Valves on A.S.M.E. Code containers shall be marked to include the set pressure (start-to-discharge) and the flow capacity rating in SCFM air at 120% of the marked set pressure. Relief valves on D.O.T. containers shall be marked in accordance with D.O.T. requirements. Original markings on safety relief valves shall not be changed.

This does not apply to relief valves installed prior to the effective date of this rule, but does apply to replacements of relief valves made after the effective date.

**§9.45. ADJUSTMENT AND REPAIR OF SAFETY RELIEF VALVES. [B.15] REV. 3/83**

(a) No person other than the manufacturer shall make repairs or adjustments on safety relief valves used with liquefied petroleum gas.

(b) The manufacturer shall design or seal safety relief valves in such manner as to minimize the possibility of unauthorized tampering.

**§9.46. INSTALLATION OF SAFETY RELIEF VALVES [B.16]**

(a) Safety relief valves shall be installed so as to communicate directly with the vapor space of the container.

(b) Safety relief valves shall be installed on the container in such a manner that the net discharge capacity of the valves is not restricted in any way.

(c) No shut-off valve shall be placed between the container and safety relief valves except where a positive mechanical means is provided to prevent the reduction of relieving capacity below that required for the vessel to which attached.

**§9.47. FILLING DENSITY. [B.17]**

(a) The "filling density" is defined as the percent ratio of the weight of gas in a container to weight of water the container will hold at 60° F. The filling densities for storage containers used with systems embodied in Division II, III, IV, V, IX, X and XI shall not exceed the ratios following:

## MAXIMUM PERMITTED FILLING DENSITY

Specific Gravity at 60°	Aboveground Containers		Underground Containers All Capacities
	0 to 1200 Gals. Total Water Capacity	Over 1200 Gals. Total Water Capacity	
.473-.480	38%	41%	42%
.481-.488	39	42	43
.489-.495	40	43	44
.496-.503	41	44	45
.504-.510	42	45	46
.511-.519	43	46	47
.520-.527	44	47	48
.528-.536	45	48	49
.537-.544	46	49	50
.545-.552	47	50	51
.553-.560	48	51	52
.561-.568	49	52	53
.569-.576	50	53	54
.577-.584	51	54	55
.585-.592	52	55	56
.593-.600	53	56	57
.601-.608	54	57	58
.609-.617	55	58	59
.618-.626	56	59	60
.627-.634	57	60	61

(b) For I.C.C. or D.O.T. Containers for use with LP Gas, filling densities shall be as prescribed by the Department of Transportation on the date of adoption of these rules.

(c) The maximum liquid volume in percent of the total container capacity may be determined for LP Gases at any liquid temperature by using the formula shown in Appendix D (§9.324).

(d) The maximum volume in percent of total container capacity shown in Appendix E (§9.325) may be used in lieu of the preceding Table 9.47 (a) to determine the maximum quantity that may be placed in a container.

### §9.48. TRANSFER OF LIQUID [B.18]

(a) Liquid may be transferred from one tank to another by means of any of the following methods:  
 Pumping  
 Pressure Differential  
 Gravity

(b) Pumps where used shall be of an approved type and may be either truck mounted or stationary.

(c) Where pressure differential is used to transfer liquid, such differential shall be obtained only with liquid petroleum gas.

(d) During the process of transferring liquid, at least one man shall remain in the immediate vicinity of the filling connection at all times.

(e) During the process of transferring liquids, no open flames, non-explosive proof lights, or other sources of ignition shall be allowed in the vicinity. No smoking shall be allowed anywhere in the vicinity during the process of transferring liquid.

(f) Truck and trailer containers shall be filled by weight, by meter, or by an approved liquid level gauging device.

**§9.49. VENTING GAS OR LIQUID PROHIBITED. [B.19] REV. 9/82**

Gas, either vapor or liquid, shall not be vented to the air before, during, or following the process of transferring LP-gas from one container to another. This shall not be construed as prohibiting the necessary purging of a container upon the initial filling or the use of approved gauging devices having bleed valves.

**§9.50. UNAUTHORIZED FILLING PROHIBITED. [B.20]**

*(Repealed January, 1983)*

**§9.51. MAXIMUM VAPOR PRESSURE AND CONTAINER WORKING PRESSURE. [B.21]**

(a) The maximum vapor pressure of the product at 100° F. which may be transferred to a container shall not exceed the design working pressure of the container.

(b) Exception: 200 psig working pressure vessels in service in Texas prior to September 1, 1981, may be continued, in service for (commercial) propane, provided that they are fitted with relief valves set for 250 psig normal start to discharge and are used in compliance with the other rules of this chapter. For the purpose of this exception, "commercial propane" is defined as having a vapor pressure not in excess of 210 psig at 100° F. This exception does not apply to LP-gas motor fuel and mobile fuel containers, which are regulated by LPG Safety §9.181 (051.05.03.170) of this title (relating to Liquid and Vapor Withdrawal Fuel Systems.)

**§9.52. EMPLOYEE INSTRUCTIONS. [B.22]**

The licensee shall provide complete instructions covering the operation, installation, and maintenance of liquefied petroleum gas equipment and/or appliances for each employee performing any or all of the above functions.

**§9.53. CONSUMER INSTRUCTIONS. [B.23]**

(a) Instruction booklets for appliances shall be given the user where available and he should be cautioned to study and preserve such booklets for reference.

(b) In industrial or commercial installations operating instructions shall be given the persons responsible for the operation of the installation.

**§9.54. HOSE SPECIFICATIONS. [B.24] REV. 1/83**

(a) Hose shall be fabricated of materials that are resistant to the action of LP Gas in the liquid and vapor phases. If wire braid is used for reinforcing the hose, it shall be corrosion-resistant material such as stainless steel.

(b) Hose subject to container pressure shall be continuously marked in clearly legible letters and figures with the manufacturer's name or other identification, and the wording "LP Gas" or "LPG".

(c) Hose subject to container pressure shall be designed for a bursting pressure of not less than 1,750 psig and a working pressure of 350 p.s.i.g.

(d) Hose subject to container pressure shall have its correctness as to design construction and performance determined by (1) Listing by Underwriters' Laboratories, Inc., or (2) Listing by a nationally recognized testing laboratory, that is approved by the Railroad Commission of Texas.

(e) Hose connections subject to container pressure shall be capable of withstanding, without leakage, a test pressure of not less than 500 psig.

(f) Hose and hose connections on the low pressure side of the regulator or reducing valve shall be designed for a working pressure of not less than 125 psig.

**§9.55. OPEN FLAMES [B.25]**

Open flames, non-explosion proof lights or other sources of ignition of escaping gas shall not be permitted in the vicinity of bulk storage containers, bottle filling plants, gas plants, and similar locations where gas is handled in large quantities.

This shall not be construed to apply to approved flame fired vaporizers or tank heaters.

**§9.56. SALES TO UNLICENSED INDIVIDUALS. [B.26]**

A licensee shall not sell a liquefied petroleum gas container to an unlicensed individual for resale nor shall a licensee sell such containers to an unlicensed individual for installation without having definitely determined that such container will be installed by a person, firm or corporation licensed to make such installations.

**§9.57. CONNECTING CONTAINER TO UNAPPROVED PIPING. [B.27]**

L. P. Gas piping shall be installed only by those persons, firms, corporations or associations who have been licensed by the Railroad Commission of Texas in accordance with the provisions of Chapter 113, Texas Natural Resources Code. A licensee shall not connect a liquefied petroleum gas container to a piping installation made by a person, firm or corporation who is not licensed to make such installations, except that connection may be made to piping installed by a person on his own premises provided the piping system complies with all rules and regulations of this Docket.

**§9.58. FILLING UNAPPROVED CONTAINERS PROHIBITED. [B.28] REV. 8/83**

No licensee shall introduce liquefied petroleum gas into any container if he has knowledge or reason to believe that such container, piping or the system or the appliance of which it is a part, were not installed in accordance with the Statutes of the State of Texas, or with the rules and regulations of the Railroad Commission of Texas, in effect at the time of installation.

*Exception:* This section does not apply to motor fuel containers and systems installed on vehicles licensed in states other than Texas, provided that such motor fuel containers and systems are in a safe operating condition.

**§9.59. FILLING UNSAFE CONTAINERS. [B.29] REV. 8/83**

No licensee shall introduce liquefied petroleum gas into any container if he has knowledge or reason to believe that such container or the piping or the appliances attached thereto are in an unsafe operating condition.

**§9.60. PURCHASE OF NONAPPROVED CONTAINERS. [B.30]**

No licensee shall purchase a liquefied petroleum gas container from the manufacturer of such container, who has not fully complied with the requirements of Chapter 113, Tex. Nat. Resources Code, and with the rules and regulations of the Railroad Commission of Texas.

A list of manufacturers who have complied will be furnished by the Director of the L. P. Gas Division, on request.

**§9.61. REPORT OF ACCIDENT. [B.31]**

In case of accident at any location where a liquefied petroleum gas system or equipment is installed, or an accident, involving liquefied petroleum gas mobile equipment, the dealer owning, operating or servicing the equipment or installation shall notify the Director of the L. P. Gas Division. This notification shall be by telephone or telegraph and shall be forwarded as soon as feasibly possible after the dealer has knowledge of the accident in order that an inspection may be made by the Railroad Commission before the site has been disturbed.

**§9.62. TANK MANUFACTURER'S NAMEPLATE. [B.33]**

*(Repealed April, 1984)*



## DIVISION I

Division I applies specifically to systems utilizing containers constructed in accordance with Interstate Commerce Commission or Department of Transportation specifications for use with LP Gas. When Department of Transportation or I.C.C. containers are used in the manner prescribed by the Department of Transportation the rules of the Department of Transportation shall apply to their transportation and handling. All Basic Rules apply to this Division unless otherwise noted.

Where Interstate Commerce Commission or Department of Transportation vessels are not used in the manner prescribed by the Department of Transportation they cease to be under the jurisdiction of the Department of Transportation. When installed and used as L.P. Gas consumer containers, they are subject exclusively to the rules of the Railroad Commission. Where such vessels are privately owned and permanently installed, they are not operated as prescribed by the Department of Transportation.

### **§9.71. REQUIREMENTS FOR CONSTRUCTION, ORIGINAL TEST AND WORKING PRESSURE OF CONTAINERS. [1.1]**

(a) All Division I containers for use with LP Gas shall be manufactured, tested and inspected in accordance with the Department of Transportation regulations and specifications.

(b) The minimum working pressure of Division I containers shall not be less than 240 lbs. per square inch gauge.

### **§9.72. MARKINGS ON CONTAINERS. [1.2]**

All Interstate Commerce Commission or Department of Transportation containers for use with LP Gas must be marked in accordance with the regulations current at the time of fabrication. Such containers shall at all times be plainly stamped to show that they have been requalified within the required test period.

### **§9.73. LOCATION OF CONTAINERS. [1.3] REV. 3/82**

(a) Ten-foot requirement. Containers shall not be located closer than ten feet to any building or group of buildings or to any adjoining property line except as provided in subsections (c) and (d) herein.

(b) Violation of 10-foot requirement. Where the construction of a building or group of buildings will result in violation of the ten-foot distance requirement, all operations of the affected LP gas installation shall cease immediately after construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (a).

(c) Container Capacity of 0 - 105 Pounds. An I.C.C. or D.O.T. container(s) of 105 pounds or less LP Gas capacity may be located within ten feet of a mobile home or group of mobile homes. When so located, total aggregate capacity of these containers shall not exceed three hundred (300) pounds of LP Gas capacity. When such a container(s) is located within ten feet of a mobile home or group of mobile homes, the relief valve(s) thereof shall be directed in a manner which will prevent vapor discharge on any mobile home unit. Container(s) of 105 pounds or less LP Gas capacity shall also be fixed and secured in such a manner that they shall not be subject to dislocation, and no container(s) shall be located within ten feet of any source of ignition.

(d) Container Capacity of More Than 105 Pounds. I.C.C. or D.O.T. cylinder(s) of more than 105 pounds LP Gas capacity may be located within ten feet of a mobile home or group of mobile homes, where the ten-foot distance requirement is unobtainable, but in no event shall such be located within three feet of a mobile home or homes or within ten feet of any source of ignition.

### **§9.74. INSTALLATION OF CONTAINERS. [1.4]**

(a) I.C.C. or D.O.T. containers for use with LP Gas shall not be installed either completely or partially buried in the ground.

(b) Containers shall be set upon a firm masonry or rock foundation so that the bottom of the container

is not in contact with the ground. Such containers shall be securely strapped to a post, or other means shall be taken to insure container against being accidentally displaced.

(c) To guard against the effects of possible settling, containers shall be connected to house piping by means of a semi-flexible connector of copper tubing or its equivalent.

#### **§9.75. SAFETY DEVICES. [1.5]**

*(Repealed March, 1983)*

#### **§9.76. CONTAINER VALVES AND ACCESSORIES. [1.6]**

(a) Each I.C.C. or D.O.T. container for use with LP Gas shall be equipped with a hand operated cylinder valve, approved for use with liquefied petroleum gas.

(b) Where I.C.C. or D.O.T. containers for use with LP Gas form a part of a multi-cylinder installation the individual containers shall be manifolded in such manner as to enable the removal and replacement of an individual container without shutting down the system. This manifolding may be accomplished by means of approved manually operated or automatic equipment.

(c) Container valves, accessory equipment and connectors shall be protected against accidental injury or tampering in an approved manner.

(d) Container valves and connections to the container shall be protected during transit either by recessing such valves and connectors into the container, or by providing properly ventilated caps or collars. Where such caps or collars are used they shall be designed to withstand a blow from any direction equivalent to a 30- pound weight dropped from a height of 4 feet. Caps or collars shall be designed so that no part of a blow will be transmitted to the valve or connector.

#### **§9.77. FILLING OF DEPARTMENT OF TRANSPORTATION CYLINDERS. [1.7]**

(a) I.C.C. or D.O.T. containers of 100 pounds LP Gas capacity or less, shall be filled by weight only.

(b) I.C.C. or D.O.T. cylinders of 101 pounds LP Gas capacity or more may be filled by either a fixed liquid level gauge or by weighing.

(c) Fixed Tube devices, where permitted, shall be so arranged that the maximum liquid level to which the container may be filled is not in excess of the maximum permitted under the filling density table in Section 9.47 (B.17) based on an initial liquid temperature not in excess of 40° F.

#### **§9.78. REQUALIFICATION OF CONTAINERS. [1.8]**

Containers shall not be refilled unless they have been requalified and maintained in accordance with I.C.C. or D.O.T. requirements. When so requalified by an approved testing station they shall be restamped as prescribed by the I.C.C. or D.O.T.

#### **§9.79. EXAMINATION OF CONTAINERS. [1.9]**

Before filling an I.C.C. or D.O.T. container for use with LP Gas the service man shall examine such container carefully. Where such container is found to be dented, bulged, or the metal gouged out by rough handling, or where there is evidence of serious corrosion, such cylinder shall not be filled.

#### **§9.80. USE OF CONTAINERS INSIDE BUILDING. [1.10]**

(a) Portable liquefied petroleum gas containers may be used but not stored inside a building when required as a fuel supply container for approved torches being used in construction, repair, or improvement of the building or structure and its fixtures and equipment, or for other industrial uses. Such installations shall comply with the following requirements:

1. Regulator shall be connected directly to cylinder valves.
2. Containers shall not have an aggregate capacity in excess of 250 pounds.

3. Such containers while being used in a building shall not be placed so that they are subject to excessive rises in temperature, mechanical injury, or to tampering by unauthorized persons.

**§9.81. INSTALLATIONS AT PUBLIC BUILDINGS. [1.11]**

Prior to the installation of a liquefied petroleum gas system, and appliances in any building open to the public, plans for such installations shall be submitted to the LP Gas Division of the Railroad Commission for examination. Upon completion of the examination, one copy of the proposed plans will be returned marked either for corrections, or with a tentative approval by the LP Gas Division. Final approval will follow a physical inspection of the completed installation by an inspector of the LP Gas Division.



## DIVISION II

Division II applies specifically to consumer systems using containers constructed in accordance with the provisions of Section VIII of the A.S.M.E. Boiler and Pressure Vessel Code, Division I. All Basic Rules apply to this Division unless otherwise noted.

### §9.91. CONTAINER VALVES AND ACCESSORIES. [2.1]

- (a) All valves shall be located on the container on any system installed for consumer use.
- (b) Filler connections and vapor return connections shall be provided with approved automatic valves to prevent backward flow in case the connection is broken.
- (c) Every container shall be equipped with a manually operated shut-off valve of a type approved by the Railroad Commission; such valves shall be installed on the service outlet of the container in such position as to be readily accessible at all times.
- (d) All liquid and vapor connections to the container except filler connections, and safety relief connections shall be equipped with approved automatic excess flow valves. Where the orifice of the shut-off valve on the tank does not exceed 5/16 inch for vapor withdrawal systems or 1/8 inch for liquid withdrawal systems, an excess flow valve will not be required, provided the regulator is directly attached to the valve outlet, or attached to the valve outlet with an approved connection of minimum practical length, and is rigidly supported.

### §9.92. RELIEF VALVES ON ABOVEGROUND CONTAINERS. [2.2]

*(Repealed March, 1983)*

### §9.93. RELIEF VALVES ON UNDERGROUND CONTAINERS. [2.3]

Containers which are intended only for underground installation, and which are not to be filled either fully or partially with liquid fuel until installed underground and completely covered, may be equipped with approved spring loaded relief valves having not less than 30% of the capacity specified in Appendix A (§9.321). Containers designed for underground installation shall not contain liquid fuel at any time when such containers are aboveground or uncovered.

### §9.94. DISCHARGE FROM SAFETY RELIEF VALVES [2.4]

- (a) The discharge from any safety relief valve shall not be vented in or under any building.
- (b) Where there is a possibility of the discharge from any safety relief valve creating a hazardous condition in an adjacent building by entering openings in such buildings, the discharge pipe shall be extended vertically upward to a point which will insure thorough dissipation of all escaping gas before it can reach the openings in the building.

### §9.95. RAIN CAPS. [2.5]

All exposed safety relief valves on containers of more than 125 gallon water capacity shall discharge vertically upward and shall be equipped with loose fitted rain caps. Return bends and pipe fittings in the upper end of relief valve outlets are not permitted.

### §9.96. REGULATOR RELIEF VALVES. [2.6]

Regulator relief valves shall be set to discharge at not less than two times nor more than three times the pressure at which the regulator is set to operate.

### §9.97. PROTECTION AGAINST FLOODING. [2.7]

On underground installations where there is a possibility of the manhole or housing becoming flooded, discharge from relief valves and regulator vent lines should be above the possible high water

level. In loose soils, underground containers shall be further protected against flood damage by firmly anchoring the container to prevent floating.

**§9.98. LIQUID LEVEL GAUGING DEVICES. [2.8]**

(a) Approved gauging devices of the slip tube, fixed tube, rotary, magnetic or rotary tube type shall be employed on all consumer storage containers.

(b) Gauging devices of the rotary tube, fixed tube, and slip tube type may be used without installation of an excess flow valve provided the bleed valve opening is not larger than a No. 54 drill size.

(c) Length of fixed tube gauging device shall be designed for the maximum level to which container may be filled. This level shall be based on the volume of the product at 40° F. on the aboveground containers and 50° F. on underground containers at their maximum filling density. (Refer to Appendix C, §9.323, for method of calculating length of fixed tube.)

**§9.99. DESIGN WORKING PRESSURE AND CLASSIFICATION OF STORAGE CONTAINERS. [2.9]**

(a) The design working pressure of consumer storage containers shall be in accordance with the following schedule:

Container Classification Type	For Gases With Vapor Pressure Not to Exceed _____ lbs. per sq. in. Gauge at 100° F.	Minimum Design Pressure of Container By: A.S.M.E. Code
100 lb.	100	100 lb. Ga.
125 lb.	125	125 lb. Ga.
150 lb.	150	150 lb. Ga.
175 lb.	175	175 lb. Ga.
200 lb.	200	200 lb. Ga.
250 lb.	250	250 lb. Ga.

(b) The shell or head thickness of any container shall not be less than 3/16 inch.

(c) All nozzle openings in shell or heads of A.S.M.E. vessels shall be either 3000 pound couplings or Schedule 80 pipe. Such nozzles shall be installed by the container manufacturer before testing.

(d) All liquefied petroleum gas containers shall be fabricated by fusion welding.

**§9.100. LOCATION OF CONSUMER FUEL STORAGE CONTAINERS. [2.10]**

(a) Containers and first stage regulating equipment shall be located outside of buildings other than those specially provided for this purpose. Each individual container shall be located with respect to any building or group of buildings or to any railroad or highway right-of-way or to any adjoining property line in accordance with the following table, except as provided in subsection (c) of this section.

Water Capacity of Container	MINIMUM DISTANCE	
	Aboveground	Underground
0 to 500 Gallons	10 ft.	10 ft.
501 to 1200 Gallons	25 ft.	20 ft.
1201 to 2000 Gallons	50 ft.	35 ft.

*Note exception in paragraph (d).*

(b) Where the construction of a building or group of buildings will result in violation of the applicable distance requirement, all operations of the affected LP gas installation shall cease immediately after

construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (a) of this section.

(c) Where the distance required by subsection (a) herein cannot be obtained, containers of 500 gallons or less water gallon capacity may be located within ten feet of a mobile home or group of mobile homes but in no event shall such be located within three feet of a mobile home or group of mobile homes or within ten feet of any source of ignition.

(d) Fuel storage containers, which are located on a rural consumer's property and from which motor fuel containers are filled, shall be located not less than 50 feet from any residence or building.

#### **§9.101. CONTAINERS INSTALLED ABOVEGROUND. [2.11]**

(a) Containers installed aboveground, except skid tanks, shall be provided with substantial masonry or non-combustible structural supports on firm masonry foundations.

(b) Except as modified by the note, aboveground containers shall be supported as follows:

(1) Horizontal containers shall be mounted on saddles and secured thereto in such manner as to permit expansion and contraction. Every container shall be so supported as to prevent the concentration of excessive loads on the supporting portion of the shell. Structural metal supports may be employed when they are protected against fire in an approved manner. Suitable means of preventing corrosion shall be provided on that portion of the container in contact with the foundations or saddles.

(2) Containers, while installed for use, shall not be stacked one above another.

**NOTE:** Any container may be installed with fireproof ferrous metal supports if mounted on concrete pads or footings and if the distance from the outside bottom of the container to the ground does not exceed five (5) feet, provided the container is in an isolated location and such installation is approved by the Railroad Commission.

(c) Upon completion of the consumer container installation, the licensee making the installation shall attach to one of the container valves, a metal tag bearing the firm name of the licensee making the installation, his current license number and the year installed.

#### **§9.102. CONTAINERS INSTALLED UNDERGROUND. [2.12]**

(a) Containers installed underground shall be so placed that the top of the container is not less than 2 feet below the normal surface of the ground unless such container is protected against mechanical injury by means of substantial curbs 2 feet from container or slabs.

(b) Underground containers shall be set on a firm foundation (firm earth may be used) and surrounded with soft earth or sand, well tamped in place.

(c) As a means of resisting corrosion, prior to being placed underground, the container shall be given a suitable protective coating consisting of a suitable metal priming, followed by a coating of anti-corrosive mastic enamel or paint.

(d) Upon completion of the consumer container installation, the licensee making the installation shall attach to one of the container valves, a metal tag bearing the firm name of the licensee making the installation, his current license number and the year installed.

#### **§9.103. REINSTALLATION OF UNDERGROUND CONTAINERS. [2.13]**

(a) When an underground container is to be reinstalled it shall be thoroughly cleaned and given a careful inspection for evidence of corrosion.

(b) If corrosion is found, the container shall be sent to a licensed fabricator for inspection and testing.

(c) If repairs are necessary, such repairs shall be made by a licensed fabricator only.

(d) Upon completion of the container installation, the licensee making the installation shall attach to one of the container valves, a metal tag bearing the firm name of the licensee making the installation, his current license number and the year installed.

#### **§9.104. SKID TANKS. [2.14]**

Containers with foundations attached (portable or semi-portable containers with suitable steel "runners" or "skids", and popularly known in the industry as "skid tanks") shall be designed, installed and used in accordance with these rules, subject to the following exceptions and additions:

(a) If skid tanks are to be used at a given general location for a temporary period not to exceed one year, they need not have fire-resisting foundations or saddles, but shall have adequate ferrous metal supports.

(b) Skid tanks shall not be installed with the outside bottom of the container shell more than one foot above the surface of the ground, unless fire-resisting supports are provided.

(c) The bottom of the skids shall not be less than 2 inches, nor more than 12 inches below the outside bottom of the container shell.

(d) All fittings having communication with the interior of the container, shall be protected against mechanical injury. Relief valves shall be on top in a vertical position in the vapor space with a guard welded to the tank extending 2 inches above the top of the valve, with a safety factor of at least 4 to 1 and open on two sides to permit removal.

(e) Skid tanks shall not be used as bulk storage containers unless all provisions of Division III are met.

(f) When connected to piping, and not permanently located on fire-resisting foundations, such connections shall be sufficiently flexible to minimize possibility of breakage or leakage of connections if container settles, moves, or is otherwise displaced.

(g) Skid, or lugs for attachment to skids, shall be secured to container in accordance with the provisions of Division I, Section VIII of the edition of the A.S.M.E. Boiler and Pressure Vessel Code in effect at the time of fabrication with a minimum factor of safety of four times the weight of the container and attachments when filled to the maximum permissible loaded weight.

(h) All attachments to the container shall be made by the container manufacturer before testing. Field welding on pressure parts is prohibited.

(i) Skid tank containers shall be mounted in steel cradles continuously welded to the container and supporting the container through an arc of 120 degrees. Steel pads shall be provided at each cradle location to prevent the concentration of excessive stresses in the shell plate of the container. Skids shall be securely attached to cradles. Skids and cradles shall be designed and installed with a minimum factor of safety of four times the weight of the container and attachments when filled to the maximum permissible loaded weight. All welding to tank shall be continuous welding.

#### **§9.105. INSTALLATIONS AT PUBLIC BUILDINGS. [2.15] REV. 3/82**

Prior to the installation of a liquefied petroleum gas system, including containers and appliances to be connected to the system, in any building open to the public, plans for such installations and manufacturer's data report(s) shall be submitted to the LP Gas Division of the Railroad Commission for examination. Upon completion of the examination, a copy of the proposed plans will be returned marked either for corrections, or with a tentative approval by the LP Gas Division. Final approval will follow a physical inspection of the completed installation by an inspector of the LP Gas Division.

#### **§9.106. PAINTING. [2.16]**

Aboveground storage containers shall be finished with a heat reflecting surface equivalent to white or aluminum and shall be maintained in good condition.



**§9.107. PROTECTION OF TANK AND ACCESSORIES. [2.17]**

(a) Tanks, valves, regulators, gauges, and other tank accessory equipment, shall be protected against tampering and mechanical damage in an approved manner. Such accessories shall also be protected during the transit of tanks intended for installation underground.

(b) In the case of underground containers, all such connections to container shall be located within a substantial dome, housing or manhole, and with access thereto by means of a substantial cover.

**§9.108. GROUNDING OF CONTAINERS. [2.18]**

Aboveground containers exceeding 1200 gallons shall be electrically grounded in an effective manner. It is recommended that containers be bonded together during filling and unloading operations.

**§9.109. VENTING REGULATORS. [2.19]**

Regulator vents shall be kept free of obstructions at all times. Provision shall be made to prevent water from entering the regulator through the regulator relief valve in case the dome of the tank is flooded.

**§9.110. DRAINING CONDENSATE [2.20]**

Liquid which has collected in the house line or yard line due to condensation shall be drained to the open air only. Under no circumstances shall such liquid be drained in or under a house or building.

**§9.111. ELECTRICAL LINES. [2.21]**

All storage containers shall be so placed in regard to electric transmission lines that in the event of the breakage of any conductor, the broken ends will not contact the container. This shall not be construed to mean electric service lines.

**§9.112. MOUNTING OF CONTAINERS. [2.22]**

All Division II containers in excess of 1200 w.g. capacity shall be supported through an arc of 120° in such a manner as to prevent the concentration of excessive stresses on the shell plate of the container.

**§9.113. LOCATION OF INDUSTRIAL OR LARGE COMMERCIAL STORAGE CONTAINERS. [2.23]**

(a) Containers and first stage regulating equipment or material handling equipment shall be located outside of buildings. Each individual container or combination of containers shall be located with respect to any building or group of buildings or to any adjoining property line in accordance with the following table:

Aggregate Water Capacity of Storage (gallons)	MINIMUM DISTANCE	
	Aboveground	Underground
2001 to 5000 Gallons (Inclusive)	75 feet	50 feet
5001 and over	100 feet	65 feet

(b) Where the construction of a building or group of buildings will result in violation of the applicable distance requirement, all operations of the affected LP-gas installation shall cease immediately after construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (a).

(c) No storage container shall exceed thirty thousand (30,000) standard U.S. gallons water capacity. Material handling equipment and storage containers having a water capacity in excess of 2000 gallons may be located not less than 50 feet from a highway right-of-way or from a railroad right-of-way.

(d) Prior to the installation of an industrial or large commercial storage container(s), plans and manufacturer's data report(s) shall be submitted to the LP Gas Division of the Railroad Commission for examination. Plans shall include distances, in all directions, from containers to all buildings. Plans covering installations located within the corporate limits of any city or town shall be accompanied by a written waiver signed by the City official authorized to sign such instruments. Upon completion of the examination, a copy of the proposed plans will be returned, marked for corrections or tentative approval by the LP Gas Division. Final approval will follow a physical inspection of the completed installation by an inspector of the LP Gas Division.

(e) Areas occupied by industrial or large commercial storage containers located aboveground shall be enclosed by a substantial heavy weight woven or welded wire fence of not less than 14½ American wire gauge at least five feet high, topped by three strands of barbed wire spaced four inches apart. All uprights and braces shall be of non-combustible material. This enclosure shall be provided with a locked entrance to prevent tampering by unauthorized persons. Fencing shall not be installed closer than five feet to the tank at any point. This fence shall be maintained in good condition at all times. Areas occupied by storage containers shall be free of combustible materials within a radius of 25 feet around the container.

### DIVISION III

Division III applies specifically to bulk storage containers used in storing gas for filling truck tanks, bottle filling plants, and other installations where gas is stored, but not used on premises. All Basic Rules apply to this Division unless otherwise noted.

#### §9.121. LOCATION OF CONTAINERS. [3.1]

(a) Containers and material handling equipment (such as pumps, meters and filling connections) shall be located outside of buildings, other than those specially designed for this purpose. Containers and material handling equipment shall be located with respect to the nearest building or to any property line in accordance with the following table:

Total Aggregate Water Capacity of Containers	Minimum Distance
Up to 500 Gallons	25 feet
501 to 8,000 Gallons	50 feet
8,001 and over	100 feet

(b) Where the construction of a building or group of buildings will result in violation of the applicable distance requirement, all operations of the affected LP-gas installation shall cease immediately after construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (a).

(c) No storage container shall exceed 30,000 standard U.S. gallons water capacity. Storage containers having a water capacity in excess of 500 gallons may be located not less than 50 feet from a highway right-of-way or from a railroad right-of-way.

(d) Prior to the installation of bulk storage container(s), plans and manufacturer's data report(s) shall be submitted to the LP Gas Division of the Railroad Commission for examination. Plans shall include distances in all directions, from containers to all buildings. Plans covering installations located within the corporate limits of any city or town shall be accompanied by a written waiver approved by the City Commission or Board of Aldermen and signed by the city official authorized to sign such instruments. Upon completion of the examination, a copy of the proposed plans will be returned, marked for corrections or tentative approval by the LP Gas Division. Final approval will follow a physical inspection of the completed installation by an inspector of the LP Gas Division.

(e) In case of bulk storage containers in heavily populated or congested areas, the Railroad Commission shall determine restrictions on individual tank capacity and total storage.

(f) Bulk storage containers shall not be placed under an electric transmission line. All bulk storage containers shall be so placed in regard to electric transmission lines that in the event of the breakage of any conductor the broken ends will not contact the container.

(g) Suitable means shall be taken by diking, diversion curbs, or grading, to prevent the accumulation of flammable liquids such as gasoline, diesel oil, etc., under adjacent liquefied petroleum gas containers.

(h) The minimum separation between liquefied petroleum gas containers and flammable liquid tanks shall be 20 feet, and the minimum separation between a container and the center line of the dike shall be 10 feet.

(i) Liquefied petroleum gas containers shall not be located within a diked area.

#### §9.122. INSTALLATION OF CONTAINERS. [3.2]

(a) All bulk storage containers in excess of 1200 w.g. capacity shall be supported through an arc of 120° in such manner as to prevent the concentration of excessive stresses in the shell plate of the container.

(b) All bulk storage containers shall be mounted on substantial masonry supports or structural steel supports on substantial masonry footings.

(c) Bulk storage containers, while installed for use, shall not be stacked one above the other.

**§9.123. PROTECTION OF BULK STORAGE AREAS. [3.3] REVISED 5/84**

(a) To protect the bulk storage containers, attachments, and transfer equipment from unauthorized tampering and mechanical damage, bulk storage areas shall be protected by fencing and/or guard rails and valve locks.

(b) Areas occupied by bulk storage containers, attachments, and transfer equipment (excluding transfer islands or transfer bulkheads, which may be outside the fenced area if protected by guard rails and valve locks in accordance with subsection (d) of this section, shall be enclosed by an all metal chain link type fence, at least six feet high and topped by three strands of barbed wire spaced four inches apart.

(1) At least two sides of the fenced enclosure shall be provided with approved means of emergency access to and from the enclosed area. The enclosure shall be equipped with a locking entrance which shall remain unlocked during the fuel transfer operations. All entrances shall be locked when the installation is unattended; provided, however, that entrances need not be locked when valve locks and electrical control locks are used in accordance with subsection (d) of this section.

(2) Fencing shall not be installed closer than five feet to the tank at any point. All uprights and braces within 25 feet of storage containers shall be of noncombustible material.

(3) No unlocked manual operating valve shall be located within four feet of the fence.

(4) The fence shall be maintained in good condition at all times.

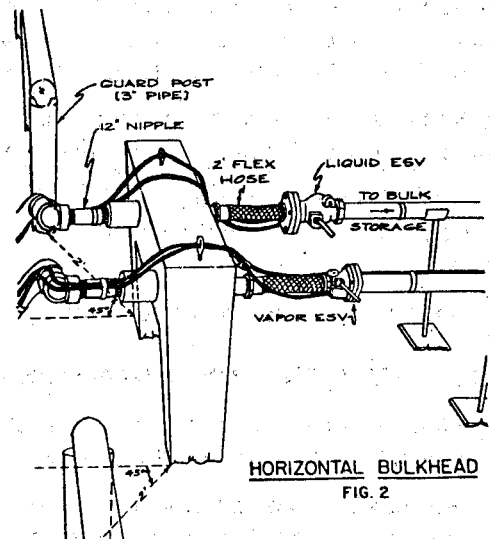
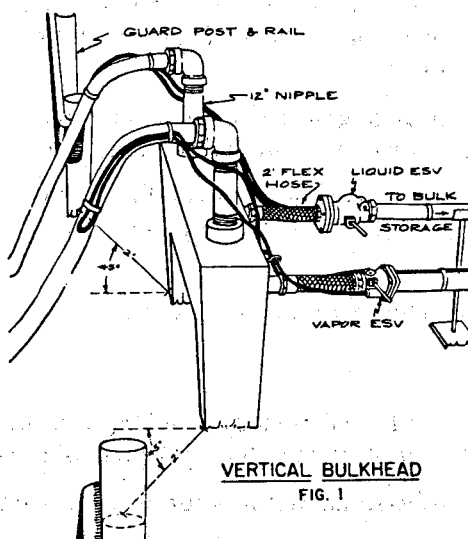
(c) Where the perimeter area fencing (i.e., fencing erected more than 25 feet from the storage containers) complies with subsection (b) of this section, guard rails which comply with subsection (d) of this section shall be used to protect all piping, pumps, and transfer equipment subject to vehicular traffic.

(d) As an alternative to fencing a bulk storage area, guard rails and suitable valve locks may be used to protect the area from mechanical damage and unauthorized tampering. Electrical controls shall also be provided with cover locks.

(1) Valve locks and electrical control locks, when in place, shall effectively prevent unauthorized withdrawal of products from the hose or piping system.

(2) Vertical guard posts shall be a minimum of three-inch schedule 40 steel capped pipe or equivalent, adequately anchored in concrete, with an overall minimum height of 30 inches above ground level. Guard posts shall be spaced not more than four feet apart.

(3) Guard railing shall be a minimum of three-inch schedule 40 steel pipe or equivalent, substantially welded to the top of the guard post, or bolted to the guard post if highway type crash railing is used. Openings for ingress and egress shall not be more than 36 inches wide.



(4) A minimum clearance of 24 inches shall be maintained between guard railing and any container, pump, compressor, or piping manifold protected by the railing. The two end guard posts protecting a bulkhead shall be located at 45° angles to the corner of the bulkhead and a minimum of 24 inches outward from the bulkhead (See Figures 1 and 2).

(5) Guard rails shall encompass and protect all piping systems on any operating end or side of the storage container and shall extend 24 inches to each side of the container or piping, whichever extends farther.

(6) Guard rails shall be maintained in good condition at all times.

(7) Bulk storage installations protected by guard rails in lieu of fencing shall display a warning sign with the following words in four-inch black and red letters: "Warning — Flammable Gas" (red); "No Trespassing" (black); "No Smoking" (red). Warning signs shall be prominently displayed visible to the public.

(e) Areas occupied by bulk storages shall be kept clear of combustible materials such as weeds and trash within a radius of 25 feet around the containers and transfer equipment.

(f) Liquid and vapor main shutoff valves on all containers shall be in an "off" position when the installation is unattended.

#### **§9.124. PAINTING. [3.4]**

All bulk storage containers shall be painted a heat reflecting color, either white or aluminum. Painting containers red or other heat absorbing colors is prohibited.

#### **§9.125. LETTERING. [3.5] REVISED 5/04**

All bulk storage installations shall be lettered in letters not less than eight inches high to indicate the name of the licensee operating the installation and the nature of contents. The previously stated lettering shall be so placed as to be readily visible to the public.

#### **§9.126. GROUNDING. [3.6]**

All bulk storage containers shall be grounded by a separate and adequate ground. The use of connecting piping shall not be considered as an adequate ground. This ground shall consist of either a ground rod or a metal grid buried to sufficient depth to insure grounding of any static charge generated and connected to the tank by means of a copper wire or wires equivalent in area to a Number 10 AWG wire. This ground wire to be attached by any means that will insure a good electrical bond, preferably by soldering.

#### **§9.127. DISCHARGE FROM RELIEF VALVES. [3.7]**

Discharge from safety relief valves on bulk storage containers shall be vented to a point at least 10 feet above the container. Such vents shall be of sufficient size not to restrict the discharge capacity of the valve and shall be fitted with loose rain caps of a type which will allow free discharge at all times. The use of return bends or fittings is not permissible.

#### **§9.128. PUMP INSTALLATION. [3.8]**

When a pump or pumps are used for transferring liquid into or out of a bulk storage container, such pumps may be driven by either electric motors or internal combustion engines. If an electric motor is used, such installation shall be in accordance with the requirements of the National Electrical Code for Class I, Group D, Hazardous Locations. If an internal combustion engine is used, it must have fully shielded ignition system, have an approved flame arrestor installed on the carburetor intake, and have an exhaust pipe of sufficient length to cool the exhaust gases below 300° F. and equipped with a spark arrestor in the discharge end of the exhaust pipe.

**§9.129. CONTAINER VALVES AND ACCESSORIES. [3.9]**

(a) All valves and connections shall be of approved type suitable for use with liquefied petroleum gas and designed for not less than the maximum pressure to which they may be subjected.

(b) Valve seat material, packing, gaskets, etc., shall be of such quality as to be resistant to the action of liquefied petroleum gases.

(c) All connections to containers shall have approved shut-off valves located as close to the container as practicable, except safety relief connections, gauging devices, filler valves and vapor return valves.

1. Filling and vapor return connections shall be provided with approved automatic valves to prevent back flow in case the filling connections are broken.

2. All other connections to containers except safety relief, filling and liquid level gauging connections, shall be equipped with approved automatic excess flow valves.

(d) Excess flow valves, where required by these standards, shall be designed to close automatically and shut off the gas or liquid flow in case:

1. The flow through the valve exceeds the predetermined flow, which must be less than the pipe line capacity to and from such excess flow valve.

2. The pressure on the inlet side of excess flow valve exceeds by a certain designed number of pounds per square inch, the pressure in pounds of the outlet of such valve.

(e) Excess flow valves may be designed with a by-pass, not to exceed a 60 drill size opening to allow equalization of pressure.

(f) Excess flow and back-pressure check valves, where required by these standards, shall be located inside the container, or at a point outside, where the line enters the containers; in the latter case, installation shall be made in such manner that any undue strain beyond the excess flow or back-pressure check valve will not cause breakage between the container and such valve. Gauging devices, which do not involve the flow of liquid or which are so constructed that outward flow of container contents, shall not exceed that passed by a No. 54 drill size, need not be equipped with excess flow valve.

(g) Any portion of either piping or hose which may at any time be closed at both ends shall be equipped with either a suitable spring loaded hydrostatic valve, or an approved spring loaded bypass valve communicating directly with the tank.

(h) A pressure gauge shall be required on all bulk storage containers. Container openings to which a pressure gauge is attached need not be equipped with shut-off valve or excess flow valve if such openings are restricted to not larger than a 54 drill size opening, and are piped to the vapor space of the container.

**§9.130. DESIGN WORKING PRESSURE. [3.10]**

(a) The design working pressure of bulk storage containers shall be in accordance with the following schedule:

<b>Container Classification Type</b>	<b>For Gases With Vapor Pressure Not to Exceed _____ lbs. per sq. in. Gauge at 100° F.</b>	<b>Minimum Design Pressure of Container By: A.S.M.E. Code</b>
100 lb.	100	100 lb. Ga.
125 lb.	125	125 lb. Ga.
150 lb.	150	150 lb. Ga.
175 lb.	175	175 lb. Ga.
200 lb.	200	200 lb. Ga.
250 lb.	250	250 lb. Ga.

(b) The shell or head thickness of any container shall not be less than 3/16 inch.

(c) All nozzle openings in shells or heads of A.S.M.E. vessels shall be either 3,000 pound couplings or Schedule 80 pipe. Such nozzles shall be installed by fabricator only.

(d) Containers to be fabricated by fusion welding only.

**§9.131. MAINTENANCE OF BULK STORAGE CONTAINERS. [3.11]**

All liquefied petroleum gas bulk storage containers, valves, accessories, and transfer equipment shall be maintained in good mechanical condition at all times and the area surrounding the containers shall be maintained so as to eliminate insofar as possible all hazards to a safe operation.

**§9.132. TESTING RELIEF AND EXCESS FLOW VALVES. [3.12]**

Adjustments or repairs found necessary shall be made only by manufacturer or his authorized representative.

**§9.133. LOADING AREA. [3.13]**

Loading and unloading areas in and around bulk storage installations shall not have a roof, over-head partition or a cover of any kind over LPG trucks and semi-trailer tanks during transfer operations.

**§9.134. ELECTRICAL INSTALLATIONS. [3.14]**

All electrical installations within a horizontal distance of 30 feet from bulk storage tanks or material handling equipment, such as pumps, meters and filling connections shall be made in strict accordance with the National Electrical Code for Class I, Group D, Hazardous Locations.

**§9.135. BULKHEADS AND EMERGENCY SHUTOFF VALVES. [3.15] NEW 6/84**

(a) Bulk storage facilities installed on or after June 1, 1984, shall include bulkheads and emergency shutoff valves (ESVs) for liquid and vapor transfer areas.

(b) Bulkheads shall be of concrete or steel and anchored sufficiently to prevent displacement of piping and fitting in the event of a truck pull-away while the transfer hose is connected.

(1) Piping through a bulkhead shall be secured to the bulkhead to prevent shifting. Piping shall terminate through the bulkhead with a Schedule 80 pipe collar and a 12-inch length of Schedule 80 pipe and forged steel elbow between the bulkhead and hose coupling.

(2) Bulkheads shall not be less than 10 feet from a container.

(3) Bulkheads, piping, and hoses shall be protected in accordance with §9.123(b) or (d) of this title (relating to Protection of Bulk Storage Areas).

(c) Emergency shutoff valves (ESVs) shall be installed in fixed piping of the transfer system upstream of the bulkhead with a flexible wire braided hose not more than 24 inches long installed between the ESVs and the bulkhead.

(1) ESVs shall be installed according to the manufacturer's instructions.

(2) ESVs shall incorporate all of the following means of closing:

(A) automatic shutoff through thermal (fire) actuation using fusible elements with a melting point not to exceed 250°F;

(B) manual shutoff at the installed location; and

(C) manual shutoff from a remote location. Remote controls shall be connected to each ESV. Emergency remote controls shall be conspicuously marked and shall be located and maintained to be readily accessible in emergencies.

(3) Where the flow of LP gas is in one direction only, a back-flow check valve may be used in lieu of an ESV in the fixed piping, provided that the back-flow check valve has a metal seat or a primary resilient seat with a secondary metal seat not hinged with combustible material.

(4) ESVs or back-flow check valves shall be installed in the piping system in such a manner that any break resulting from a pull-away will occur on the transfer hose side of the bulkhead and the valves and piping on the container side of the bulkhead will remain intact.



## DIVISION IV

Division IV applies to Tank Trucks and Semi-Trailer Tanks used in the transportation and distribution of liquefied petroleum gases. All Basic Rules apply to this Division unless otherwise noted.

### §9.141. PROTECTION OF SAFETY RELIEF VALVES. [4.1] REV. 3/83

Safety relief valves installed after March 7, 1983, on containers used for transporting LP-gas shall be of the full internal type so as to provide maximum protection against breaking off or dislocation in case of an accident.

### §9.142. PROTECTION OF VALVES AND ACCESSORIES. [4.2] REV. 3/83

All valves (other than safety relief valves), pumps and piping which are a part of truck and trailer tanks used in the transportation of liquefied petroleum gases shall be located and/or protected by recessing or by heavy guard rails so as to provide maximum protection against breaking off or dislocation in case of an accident.

### §9.143. CONTAINER VALVES AND ACCESSORIES. [4.3]

- (a) The discharge outlet shall be provided with a suitable automatic excess flow valve.
- (b) Filling and vapor return connections shall be provided with approved automatic valves to prevent back flow in case the filling connection is broken.
- (c) All other connections to containers, except safety relief, filling and liquid level gauge connections, shall be equipped with approved automatic excess flow valves.
- (d) All container inlets and outlets, except safety relief valves, liquid level gauging devices, and pressure gauges, shall be labeled to designate whether they communicate with vapor or liquid space. Labels may be on valves.
- (e) Excess flow valves, where required by these standards, shall be designed to close automatically and shut off the gas or liquid flow in case:
  - 1. the flow through the valve exceeds a predetermined flow, which flow must be less than the pipe line capacity to and from such excess flow valve.
  - 2. The pressure on the inlet side of the excess flow valve exceeds by a certain designed number of pounds per square inch, the pressure in pounds of the outlet of such valve.
- (f) Excess flow valves may be designed with a by-pass, not to exceed a 60 drill size opening to allow equalization of pressure.
- (g) Excess flow and back-pressure check valves, where required by these standards, shall be located inside the container, or at a point outside where the line enters the containers; in the latter case, installation shall be made in such manner that any undue strain beyond the excess flow or back-pressure check valve will not cause breakage between the container and such valve. Gauging devices, which do not involve the flow of liquid or which are so constructed that outward flow of container contents, shall not exceed that passed by a No. 54 drill size, need not be equipped with excess flow valve.

**§9.144. THERMOMETER WELL. [4.4]**

All truck or trailer containers shall be equipped with a thermometer well, in order that the internal temperature of the content may be easily determined.

**§9.145. PRESSURE GAUGE. [4.5]**

A pressure gauge shall be required on truck tanks and semi-trailer containers. Container openings to which a pressure gauge is attached need not be equipped with shut-off valve or excess flow valve if such openings are restricted to not larger than 5/4 drill size and are piped to the vapor space of the container.

**§9.146. PIPING AND FITTINGS. [4.6]**

(a) All piping, tubing and fittings shall be securely mounted and shall be amply protected against damage and breakage.

(b) All piping shall be extra heavy steel. Fittings shall be forged steel having a minimum working pressure of 2000 psi. The use of cast iron fittings is prohibited.

(c) Any portion of either piping or hose which may at any time be closed at both ends shall be equipped with a suitable spring loaded relief valve, or an approved spring loaded by-pass valve communicating directly with the tank.

**§9.147. TRANSFER OF LIQUIDS. [4.7]**

(a) Liquid may be transferred from one tank to another by means of any of the following methods:

- Pumping
- Pressure Differential
- Gravity

(b) Pumps, where used, shall be of an approved type and may be either truck mounted or stationary.

(c) Where pressure differential is used to transfer liquid, such differential shall be obtained only with liquefied petroleum gas.

(d) During the process of transferring liquid at least one operator shall remain in the immediate vicinity of the filling connection at all times.

(e) During the process of transferring liquids no open flames, non- explosion proof lights or motors shall be allowed in the vicinity. Smoking shall not be allowed anywhere in the vicinity during the process of transferring liquid. The use of power take-off, powered by truck motor, is not prohibited.

(f) Truck and trailer containers shall be loaded by weight, by meter or any approved liquid level gauging device.

(g) Each tank truck or trailer shall carry chock blocks which shall be used to prevent rolling of the vehicle whenever it is parked, including when loading and unloading.

**§9.148. FILLING CONTAINERS. [4.8]**

(a) All wholesalers shall show on the manifest given to the truck operator, the vapor pressure and gross gallons of gas and the loading temperature.

(b) Marketers and users shall not introduce a liquefied petroleum gas, or a mixture thereof, into any container when the vapor pressure of such gas at 100° F. exceeds the design working pressure of the container.

**§9.149. MOUNTING AND CONNECTING PUMPS. [4.9]**

(a) Pumps of approved design and properly protected may be mounted upon liquefied petroleum gas tank trucks or tractor units.

(b) Pumps shall be connected to the tank by means of an approved flexible connection if necessary to prevent undue stresses being imposed on the piping.

(c) Where flexible connections pass through cradles or over cross members of frame work, they shall be protected against abrasion or wear.

**§9.150. HOSE SPECIFICATIONS. [4.10]**

(See *Basic Rules*, §9.54 (B.24))

**§9.151. MOUNTING CONTAINERS. [4.11]**

(a) Truck and semi-trailer containers shall be mounted in steel cradles continuously welded to the container and supporting the container through an arc of 120 degrees. Steel pads shall be provided at each cradle location to prevent the concentration of excessive stresses in the shell plate of the container. All attachments to the container shall be made by the container manufacturer before testing.

(b) Containers shall be mounted on truck or semi-trailer frame by suitable hold down bolts or other approved means and shall be provided with stops to prevent shifting on such frames. U-Bolts or J- Bolts are not approved

**§9.152. ELECTRICAL EQUIPMENT AND LIGHTING. [4.12]**

Tank trucks, and tank semi-trailers shall not be equipped with an artificial light other than electricity. Lighting circuits shall have suitable overcurrent protection (*fuses or automatic circuit breakers*); the wiring shall have sufficient current carrying capacity and mechanical strength, and shall be suitably secured, insulated and protected against physical damage.

**§9.153. LIQUID LEVEL GAUGING DEVICES. [4.13]**

Each truck and trailer container shall be equipped with an accurate liquid level gauging device of approved design, for example, a rotary gauge, slip tube, or a fixed tube device. A fixed tube device consists of a dip pipe of small size, equipped with a valve at the outer end. Fixed tube devices shall be so arranged that the maximum liquid level to which the container may be filled is not in excess of the maximum permitted under the filling density table in Section 9.47 (B.17), but based on an initial liquid temperature not to exceed 40° F. Liquid level gauging devices of the rotary tube, fixed tube and slip tube type may be used without installation of an excess flow valve, provided that bleed valve opening is not larger than a No. 54 drill size. (*Refer to Appendix C (§9.323) for method of calculating length of fixed tube.*)

**§9.154 TRUCK TANKS AND SEMI-TRAILER TANKS. [4.14]**

(a) All semi-trailer tanks shall be of the fifth wheel type and shall be attached to the tractor in such manner as to positively prevent separation of the tractor and semi-trailer while the combination is in motion.

(b) Every tank truck or semi-trailer tank shall be equipped with a system of brakes in full compliance with the requirements of Section 132 of the Uniform Traffic Code as promulgated by the Texas Department of Public Safety.

(c) Every truck or semi-trailer shall be provided with lighting equipment as required by Article 14, Sec. 108 to 131, Texas Uniform Traffic Code and the requirements of the Texas Department of Public Safety.

**§9.155. DESIGN WORKING PRESSURE AND CLASSIFICATION OF CONTAINERS. [4.15]**

(a) Transport containers shall be designed and classified as follows:

Container Classification Type	For Gases With Vapor Pressure Not to Exceed _____ lbs. per sq. in. Gauge at 100° F.	Minimum Design Pressure of Container By: A.S.M.E. Code
100 lb.	100	100 lb. Ga.
125 lb.	125	125 lb. Ga.
150 lb.	150	150 lb. Ga.
175 lb.	175	175 lb. Ga.
200 lb.	200	200 lb. Ga.
250 lb.	250	250 lb. Ga.

(b) The shell or head thickness of any container shall not be less than 3/16 inch.

(c) All nozzle openings in shells or heads of A.S.M.E. Vessels shall be either 3000 pound couplings or Schedule 80 pipe. Such nozzles shall be installed by the fabricator only, before testing.

(d) Containers to be fabricated by fusion welding only.

(e) All truck tanks and semi-trailer tanks shall be equipped with suitable full baffles, adequate to prevent surging of tank contents.

**§9.156. STATIC STRAPS. [4.16]**

Tank trucks and semi-trailers shall be equipped with static straps or other approved devices, long enough to reach the ground when the container is partially loaded in order to drain off such static charges as may be generated.

**§9.157. METALLIC CONNECTION. [4.17]**

Tanks, chassis, axles, and springs shall be electrically connected.

**§9.158. EXHAUST SYSTEM. [4.18]**

(a) The exhaust system including muffler and exhaust line, shall have ample clearance from the fuel system and combustible materials, and shall not be exposed to accumulation of greases, oil, or gasoline.

(b) The exhaust system, including all units, shall be constructed and installed in a workmanlike manner. Muffler cut-outs shall not be used.

**§9.159. EXTINGUISHERS REQUIRED. [4.19]**

(a) Each truck and/or semi-trailer shall be provided with at least two hand fire extinguishers, suitable for extinguishing gas fires. These extinguishers shall be, insofar as possible, placed so that in case of accident at least one extinguisher will be accessible. Extinguishers shall be at all times fully charged and shall be kept in good mechanical condition. One of these two extinguishers shall be of 15 or 20 lbs. capacity, the other not less than 5 lbs.

(b) Fire extinguishers shall not be mounted in any way which will prevent instant use in case of an emergency.

**§9.160. MAINTENANCE OF EQUIPMENT. [4.20]**

All liquefied petroleum gas transport trucks, tractors and semi-trailer units shall be kept in good mechanical condition. Brakes, running gear, tires, and lighting system shall be in good operating condition at all times.

**§9.161. TESTING EXCESS FLOW AND RELIEF VALVES. [4.21]**

Repairs or adjustments are to be made only by the manufacturer or his authorized representative.

**§9.162. SMOKING. [4.22]**

Smoking at anytime in, around, or near truck is prohibited.

**§9.163. PROTECTION AGAINST COLLISIONS. [4.23]**

Each tank truck and semi-trailer shall be provided with properly attached steel bumpers or chassis extension at the rear which shall be so arranged as to adequately protect the tank, piping, valves, and fittings in case of collision.

**§9.164. PARKING OF LIQUEFIED PETROLEUM GAS TRANSPORTS. [4.24]**

(a) Liquefied petroleum gas transport trucks or semi-trailers when not in use or being serviced shall not be parked closer than 50 feet to any building or group of buildings, except where such building or buildings are devoted exclusively to the transaction of liquefied petroleum gas business operations.

(b) Liquefied petroleum gas transports shall not be left parked at night on any highway, road, street, or alley.

(c) Liquefied petroleum gas transports shall not be parked beneath or adjacent to any electric transmission line in such position that there is a possibility of a conductor contacting the tank in event of breakage.

**§9.165. FILLING CONTAINERS ON HIGHWAYS, ROADS, STREETS OR ALLEYS. [4.25]**

Filling of liquefied petroleum gas containers on highways, roads, streets, or alleys, except where such containers are motor fuel containers or on machinery being used for the construction or maintenance of such roads or highways, is prohibited.

**§9.166. FILLING UNAPPROVED TRUCK AND TRAILER TANK PROHIBITED. [4.26]**

(a) LPG Form No. 4, when issued by the Director of the LP Gas Division, Railroad Commission of Texas, and properly affixed in accordance with the LPG Form No. 4 placement instructions to the tank or combination of tanks for which it has been issued, shall be evidence that the design, construction, assembly, and mounting of the liquefied petroleum gas tank(s) have been approved by the Commission for use in the transportation of liquefied petroleum gas. Such form also shall authorize the person to whom it has been issued and the bonafide employees of a person, firm or corporation to whom it has been issued, where permitted by law to operate a liquefied petroleum gas truck, and no other, to operate the truck which hauls such tank(s) in the transportation of liquefied petroleum gas and further shall authorize the filling of the tank(s) for which it has been issued with liquefied petroleum gas.

(b) No person shall operate a truck in the transportation of liquefied petroleum gas in this state unless an LPG Form No. 4 authorizing its operation has been affixed to the tank or combination of tanks in accordance with placement instructions or unless its operation has been specifically approved by a communication from the Railroad Commission of Texas.

(c) No person shall introduce liquefied petroleum gas into a tank or tanks unless an LPG Form No. 4 issued for that tank or combination of tanks is properly affixed in accordance with LPG Form No. 4 instructions or unless a communication from the Railroad Commission of Texas specifically approves the operation of such tank.

(d) The LPG Form No. 4 is not transferrable by the person, firm or corporation to whom it has been issued, and the Division must be notified either (1) prior to a sale or other transfer of legal rights in any tank or combination of tanks for which an LPG Form No. 4 has been issued, or (2) prior to the use of tank(s) for LPG storage or transport after such transfer.

**§9.167. PAINTING. [4.27]**

All truck tanks and/or semi-trailer tanks used in the transportation of liquefied petroleum gases shall

be finished with a heat reflecting surface, either white or aluminum and shall be maintained in good condition. Painting containers red or other heat absorbing colors is prohibited.

**§9.168. LETTERING. [4.28]**

(a) Name of Licensee and Contents. All such tanks and semi-trailer tanks, in addition to the heat reflecting finish, shall have painted or permanently affixed thereon, in letters not less than six inches in height, the name of the licensee operating the transport unit, and the nature of the contents of the tanks.

(b) Exception. Where a transport unit is loaned or leased for a period of time not to exceed thirty days, the units may have painted or permanently affixed thereon, in lieu of the name of the licensee operating the transport unit, the name of the owner of the transport unit in letters not less than six inches in height.

## DIVISION V

EFFECTIVE 3/21/83

Division V applies to motor fuel and mobile fuel containers for installations and use on automobiles, trucks, buses, tractors, and other construction machinery, farm tractors and other types of farm machinery. All Basic Rules apply to this Division unless otherwise noted. (See *Division XI for Industrial fork lift trucks.*)

### §9.171. DEFINITIONS AND APPLICABILITY. REV. 7/83

(a) The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise:

- (1) "Approved" - unless otherwise noted, means approved by the Railroad Commission.
- (2) "Auxiliary engine" - an engine used for purposes other than propelling a vehicle.
- (3) "Public transportation vehicle" - includes, but is not limited to, taxis, buses (other than school buses), airport courtesy cars, and any vehicle for hire to transport persons.
- (4) "School bus" - a vehicle that is sold or used for purposes that include carrying students to and from school or related events, but does not include a bus designed and sold for operation as a common carrier in urban transportation.
- (5) "Recreational Vehicle" (RV) - a vehicular type unit primarily designed as temporary living quarters for recreational, camping, or travel use, which either has its own motive power or is mounted on or towed by another vehicle. The basic entities are: travel trailer, camping trailer, truck camper and motor home.

(b) Provisions of Division V apply to motor fuel and mobile fuel installations made after March 21, 1983.

### §9.172 CONTAINERS.

(a) All motor fuel containers and permanently mounted mobile fuel containers shall be designed, fabricated, tested, and marked (or stamped) in accordance with Division I, Section VIII of the edition of the A.S.M.E. Boiler and Pressure Vessel Code in effect at the time of manufacture, or in accordance with the regulations of the United States Department of Transportation (D.O.T.). **NOTE:** *Motor fuel containers installed on self-propelled vehicles used on public roads shall be constructed only in accordance with Division I, Section VIII of the edition of the A.S.M.E. Boiler and Pressure Vessel Code in effect at the time of manufacture.*

(b) The minimum design working pressure for D.O.T. containers shall be not less than 240 p.s.i.g. The minimum design working pressure for A.S.M.E. containers shall be not less than 250 p.s.i.g., except that containers installed on any vehicle within enclosed spaces (including recesses or cabinets) shall have a minimum design working pressure not less than 312 p.s.i.g.

(c) LP-gas motor fuel containers on passenger carrying vehicles shall not exceed 200 gallons aggregate water capacity. No more than two containers shall be mounted on a vehicle.

(d) LP-gas motor fuel containers on other than passenger vehicles normally operating on the highways shall not exceed 175 gallons individual water capacity, 300 gallons aggregate water capacity. No more than two containers shall be mounted on a vehicle.

(e) All motor fuel containers of 130 gallons water capacity or more shall be baffled and shall have steel pads continuously welded to the container and supported through an arc of 120 degrees in such a manner as to prevent the concentration of excessive stresses in the shell plate of the container.

(f) Containers covered by this section shall be equipped for filling into the vapor space only. Motor fuel and mobile fuel containers shall not be filled in excess of the maximum permitted filling density.

### §9.173 SAFETY RELIEF VALVES.

(a) All A.S.M.E. motor fuel and mobile fuel containers shall be equipped with internal type spring

loaded safety relief valves which comply with Basic Rules §§9.42-9.44 of this title (relating to discharge capacity, setting, and construction and marking of safety relief valves).

(b) Prior to reinstallation of a motor fuel or mobile fuel container equipped with an external relief valve, such container must be retrofitted with an internal safety relief valve of proper size and capacity in compliance with Basic Rules §§9.42-9.44 of this title (relating to discharge capacity, setting, and construction and marking of safety relief valves).

(c) Safety relief valve discharge shall be directed upward within 15 degrees of vertical so that any gas released will not impinge upon containers, any part of the vehicle, adjacent persons or vehicles, or the inside of the passenger or luggage compartments.

(d) Safety relief valve discharge vent lines shall be steel or approved high pressure LP-gas hose sized, located, and secured so as to permit sufficient safety relief valve relieving capacity. Discharge vent lines shall be able to withstand the pressure from the relief vapor discharge when the relief valve is in the full open position. A spring-loaded dust or rain cap shall be provided to minimize the possibility of the entrance of dirt or water into either the relief valve or its discharge vent line, and such dust or rain cap shall remain in place except when the relief valve operates. In this event, it shall permit the relief valve to operate at sufficient capacity.

(e) Threaded safety relief valve collars shall be connected to the discharge vent line by means of threaded fittings or manufactured hose fittings designed specifically for this purpose.

#### **§9.174 PROTECTION OF VALVES AND FITTINGS.**

(a) Container valves, appurtenances, and connections shall be adequately protected to minimize the possibility of damage due to accidental contact with stationary objects or objects thrown up from the ground. This protection shall be provided by the container manufacturer by means of a heavy metal fitting guard with a minimum of seven gauge thickness, adequately extended to protect all valves when such valves are in full open position. The guard shall be permanently welded to the container or bolted to the guard tabs. Where used, guard tabs shall have a minimum tensile strength of 55,000 p.s.i.g. and shall be welded to the vessel at the time of fabrication. The bolts securing the guard to the container must be a minimum of 3/8 inch grade five steel machine bolts. **EXCEPTION:** A motor fuel container which is located within an automobile's trunk area, with parts of the vehicle providing protection and all valves and fittings protected by a vapor tight shroud, will be deemed to comply with the foregoing requirement.

(b) Float gauges, relief valves, and other container appurtenance located outside the valve guard area shall be recessed inside the container or protected by a welded guard surrounding the appurtenances.

#### **§9.175 CONTAINER APPURTENANCES.**

(a) All valves, gauging devices, and appurtenances shall have a minimum rated working pressure of 250 p.s.i.g.

(b) Manual shut-off valves shall be designed to provide positive closure under service conditions and shall be equipped with an internal excess flow check valve designed to close automatically at the rated flow of vapor or liquid specified by the manufacturer.

(c) Containers shall be installed in such manner that access to main shut-off valves is not hindered by the vehicle's frame, body, or any equipment or appurtenance attached to or mounted on the vehicle. This is not to be construed to prohibit the installation of containers inside a vehicle's passenger or luggage compartments where access doors to these compartments may be locked to secure the vehicle and its contents.

(d) Double back flow check valves shall be of the spring-loaded type and shall close when the flow of LP-gas is either stopped or reversed. This valve shall be installed in the fill valve opening of the container, whether used for remote or direct filling.

(e) All motor fuel and mobile fuel containers installed on public transportation vehicles shall be equipped with an automatic means to prevent filling in excess of the maximum permitted filling density.



(f) An overfilling prevention device may be installed on the container or exterior of the compartment when remote filling is used, provided that a double back flow check valve is installed in the remote fill valve opening.

(g) All container openings, except those for safety relief valves and gauging devices, shall be permanently labeled by appropriate means to designate whether they communicate with the liquid or vapor space.

(h) A solid steel plug shall be installed in unused openings.

#### **§9.176 VAPOR AND LIQUID SERVICE VALVES.**

When not in use, motor fuel and mobile fuel container withdrawal devices, either liquid or vapor, shall be properly fitted with threaded caps to prevent accidental withdrawal of product to the atmosphere.

#### **§9.177 GAUGING DEVICES.**

(a) LP gas motor fuel containers shall be fabricated so that they may be equipped with a fixed liquid level gauge capable of indicating the maximum permitted filling level computed in accordance with procedures contained in Appendix E (§9.235).

(b) The fixed liquid level gauge opening in the container shall be designed so the bleeder valve maximum opening to the atmosphere is no larger than a No. 54 drill size. If the bleeder valve is installed at a remote location away from the container, the container fixed liquid level gauge opening and the remote bleeder valve shall be orificed to a No. 54 drill size.

#### **§9.178 CARBURETION EQUIPMENT.**

LP-gas carburetion equipment shall be listed or approved equipment and recommended for such service by the manufacturer.

#### **§9.179 MOTOR FUEL VAPORIZERS.**

(a) Vaporizers shall be fabricated of material suitable for LP-gas service and resistant to the action of LP-gas under service conditions. Such vaporizers shall be designed for engine fuel service and listed by Underwriter's Laboratory or other nationally recognized testing agency approved by the Railroad Commission, and shall comply with the following:

(1) Basic Rule §9.36;

(2) The vaporizer proper, its component parts and any device used with it which may be subjected to container pressure shall have a design pressure of at least 250 p.s.i.g.

(b) Vaporizers shall be plainly and permanently marked at a readily visible point as follows:

(1) design pressure of the fuel containing portion in p.s.i.g.;

(2) water capacity of the gas containing portion of the vaporizer in pounds; and

(3) the name and address of the manufacturer.

(c) The vaporizer shall not be equipped with a fusible plug. The heat exchange surface area between the fuel in the vaporizer and the heating medium shall be of sufficient area to transfer necessary heat to complete vaporization of the gas at all times.

(d) Each vaporizer shall have a valve or suitable plug at or near the lowest portion of the section occupied by the water to permit complete drainage.

(e) Vaporizers shall be securely mounted to the vehicle body or to the engine in such a manner as to minimize the possibility of it becoming loose due to vibrations or impact.

#### **§9.180 REGULATORS.**

(a) Approved automatic pressure reducing equipment, properly secured, shall be installed between

the fuel supply container and the carburetor to regulate the pressure of the fuel delivered to the carburetor.

(b) Regulators may be either part of the vaporizer or a separate unit.

#### **§9.181 AUTOMATIC SHUT-OFF DEVICES.**

An approved automatic shut-off device shall be provided in the fuel system. This device shall prevent flow of fuel to the carburetor when the engine is not running even if the ignition switch is in the "on" position.

#### **§9.182 FUEL FILTERS.**

Fuel filters shall be of an approved type and can be either separate or a part of a combination unit.

#### **§9.183 HOSE SPECIFICATIONS, HOSE CONNECTIONS AND FLEXIBLE CONNECTORS.**

Hose, hose connections, and flexible connectors used for conveying LP-gas liquid or vapor at pressure exceeding five p.s.i.g. shall be fabricated of materials resistant to the action of LP-gas liquid and vapor, shall be of stainless steel wire braid reinforced construction, and shall comply with Basic Rule § 9.54.

#### **§9.184 INSTALLATION OF CONTAINERS AND CONTAINER APPURTENANCES.**

(a) Containers shall be located in a place and in a manner to minimize the possibility of damage to the container and its fittings. All containers shall be located within the physical limits of the vehicle and shall be protected by the vehicle's bumpers. Extending a chassis or bumper for the purpose of mounting containers is prohibited. Containers shall not be installed less than eight inches from the engine or exhaust system, or shall be shielded against direct heating to prevent increased internal pressure of the container.

(b) Containers not exceeding 85 gallons water capacity may be mounted in an elevated position, provided such containers are installed within the confines of an overhead steel framework which is common with or attached to the vehicle's frame and is capable of supporting 1.5 times the weight of the vehicle. No container shall be located directly above another container.

(c) Containers shall not be mounted on roofs, ahead of the front axle or beyond the rear bumper of the vehicle, and no part of the container or its appurtenances shall be above the highest level of the vehicle.

(d) Containers shall be installed with as much road clearance as possible, but never less than the minimum normal road clearance of the vehicle under maximum load conditions. Minimum clearance shall be to the bottom of the container or to the lowest fitting on the container or housing, whichever is lower.

#### **§9.185 INTERIOR CONTAINER INSTALLATION.**

(a) Containers mounted in the interior of a vehicle (including camper shells) shall be installed in such a manner that any LP-gas released will not communicate with the driver or passenger carrying compartments, or with any space containing radio equipment. This may be accomplished by:

(1) Locating the container and the appurtenances in an enclosure which is securely attached to the vehicle and is gas tight. The enclosure shall be vented to the outside of the vehicle. The luggage compartment (trunk) of a vehicle may constitute such an enclosure provided it complies with this provision; or

(2) Enclosing the container appurtenances and their connections in a shroud type structure, which is securely attached to the container and is gas tight. The shroud shall be vented to the outside of the vehicle. Shroud access doors shall be secured in place by fasteners such as wing nuts or spring loaded latches, and shall not require the use of tools for removal. The use of locks on shroud access doors is prohibited.

(b) Enclosures, structures, seals, and conduits used to vent enclosures shall be fabricated of durable materials resistant to damage or dislodging.

(c) Containers installed within any type of enclosure shall be filled remotely. Remote filling connections (double back flow check valves) and fixed liquid level gauging devices shall be permanently installed on the outside of the vehicle so that no gas from fueling and gauging operations will be released inside the passenger or luggage compartments.

(d) Coiling an attached filler and fixed liquid level gauge remote hose inside the luggage compartment is prohibited.

#### **§9.186 PIPE AND HOSE INSTALLATION.**

(a) The piping system shall be designed, installed, supported, and secured in such a manner as to minimize the possibility of damage due to expansion, contraction, vibration, strains, or wear.

(b) Piping shall be installed in a protected location with a minimum distance of eight inches from the exhaust, catalytic converter, and exhaust manifold, or shall be insulated to prevent heat deterioration. If piping is installed outside, under the vehicle and below any insulation or false bottom, fastenings and protection shall be provided to prevent abrasion or damage due to vibration. At a point where the piping passes through structural members or floors, a rubber grommet or bulkhead fitting shall be installed to prevent chafing. Aluminum fittings are prohibited.

(c) Fuel line piping shall be installed to enter the vehicle through the floor directly beneath, or adjacent to, the container. If a branch line is required, the "tee" connection shall be in the main fuel line under the floor and outside the vehicle.

(d) When two containers are installed and connected by a common fuel line (liquid or vapor), a single seated back pressure check valve shall be installed in each fuel line ahead of the "tee" fitting, or a cross fitting which incorporates a hydrostatic relief valve and two backflow check valves may be used.

(e) Exposed parts of the piping system shall be of either corrosion resistant material or adequately protected against exterior corrosion.

(f) At the completion of the installation, piping systems, including hoses, shall be tested and proved free of leaks at not less than normal operating pressure.

(g) There shall be no fuel connection between a tractor and trailer or other vehicle units while such units are in motion.

(h) A hydrostatic relief valve shall be installed away from the container in each section of piping (including hose) in which liquid LP gas can be isolated between shut-off valves so as to relieve to a safe atmosphere (away from other pressure parts of the system) the pressure which could develop from the trapped liquid. Hydrostatic relief valves shall have a pressure setting of not less than 400 p.s.i.g. nor more than 500 p.s.i.g.

#### **§9.187 SCHOOL BUS INSTALLATION.**

(a) This section applies to LP-gas systems supplying LP-gas to propel school bus engines. Prior to the installation of or conversion to an LP-gas carburetion system on any form of vehicle to be used as a school bus by either public or private educational institutions, the licensee making the installation or conversion shall submit specifications and other such information as the Commission may reasonably require to the LP-Gas Division for examination. Specifications shall include, but not be limited to, the number of units to be installed or converted according to such specifications, vehicle identification numbers, and the name of the licensee making such installations or conversions. Upon completion of the examination, a copy of the proposed specifications will be returned, marked either for correction or tentative approval. Final approval will follow a physical inspection of each completed installation or conversion by an inspector of the LP-Gas Division to ensure compliance. Any changes, alterations, or additions will necessitate resubmission of specifications for approval.

(b) All A.S.M.E. motor fuel containers mounted on school buses shall have a minimum design working

pressure of 312 p.s.i.g. All valves and fittings shall be located in the upper portion of the container (i.e., top fitted). EXCEPTION: Vans used as school buses having containers not exceeding 40 gallons aggregate water capacity may have valves and fittings located in the lower portion of the container (i.e., inverted type container).

(c) Each container shall be fitted with an approved automatic means to prevent filling in excess of the maximum permitted filling density. The motor fuel container shall be installed on the underside of the vehicle on the streetside. Installation of the container on top or at the rear of the bus is prohibited.

(d) LP-gas containers used on school buses shall not exceed 115 gallons aggregate water capacity.

(e) The container shall be secured to the school bus frame (NOT to the floor of the bus) by fastenings designed with a safety factor of four, to withstand loadings in any direction equal to four times the filled weight of the container. The container shall have a minimum of two padded mounting frame brackets, continuously welded to the container through an arc of 120 degrees. Container brackets shall be secured in place using lock washers and double nutted 1/2 inch grade eight tensile strength bolts.

(f) Containers shall be installed with as much clearance as practical, but never less than the minimum normal road clearance of the vehicle under maximum load conditions. Minimum clearance shall be to the bottom of the container or to the lowest fitting on the container or housing, whichever is lower. All container valves and fittings shall be protected by means of a heavy gauge metal guard having a minimum thickness of seven gauge steel.

(g) An eight inch x 14 inch minimum size plumbing chamber door shall be provided in the street sidewall of the bus to allow easy access for filling or securing the service valve in the event of an emergency. The plumbing chamber door shall be hinged and latched, but not locked.

(h) All safety relief valves shall be vented through the street sidewall of the bus skirting. The relief valve discharge vent line shall be metallic pipe or tubing (other than aluminum) and shall be sized, located, and secured, so as not to restrict full discharge.

(i) The relief valve discharge vent lines shall run vertically upward and shall be secured against the outside skirting, continuing upward between windows, terminating at the rolling eaves of the bus roof. A spring-loaded dust or rain cap must be provided which will not divert the discharge of LP-gas onto the container or vehicle. A flexible high pressure LP-gas hose connection shall connect the relief valve threaded collar to the discharge vent line by means of threaded fittings or manufactured hose fittings designed specifically for this purpose. The relief valve discharge vent line and the flexible high pressure LP-gas hose shall withstand the pressure from the relief discharge when the relief valve is in the full open position.

#### **§9.188 USE OF EXTRA LIQUID OUTLET ON MOTOR FUEL CONTAINERS.**

A.S.M.E. motor fuel containers fitted by the manufacturer with extra liquid outlets may be used for filling other motor fuel containers, provided the container and its appurtenances are installed and protected as follows:

(1) Motor fuel containers used in this service shall be installed and limited to trucks of up to one ton capacity with open cargo space.

(2) The cargo space shall not be enclosed at anytime in a manner that would prevent a complete exposure of the container.

(3) The container's extra liquid outlet shall be fitted with an approved manual shut-off valve and an internal excess flow valve (or an approved manual shut-off valve incorporating an internal excess flow valve) designed to close automatically at the rated flow of vapor or liquid specified by the manufacturer.

(4) The manual shut-off valve shall incorporate a hydrostatic relief valve set at 400 to 500 p.s.i.g.

(5) Rigid piping is prohibited.

(6) The extra liquid opening in the container shall be located in the upper shell of the container.

Any appurtenances attached to this opening shall be adequately protected against mechanical injury or dislocation. This may be accomplished by adding to the existing fitting guard or by constructing a new fitting guard with a minimum thickness of seven gauge steel.

**NOTE: WELDING SHALL NOT BE PERMITTED ON THE CONTAINER OR PRESSURE PARTS EXCEPT BY A LICENSED FABRICATOR.**

(7) The liquid hose must be of an approved type as set out in Section 9.54 of this title (relating to hose specifications) and shall not exceed 20 feet in length and 3/4 inch in diameter.

(8) All transfer of product must be done by pressure differential ONLY.

(9) The hose end must be equipped with an approved shut-off valve. When not in use, the hose end and shut-off valve shall be kept locked in a ventilated metal box to prevent tampering by unauthorized persons. The metal box shall be attached to the vehicle to prevent accidental displacement. BOTTLE FILLING FROM MOTOR OR MOBILE FUEL CONTAINERS IS PROHIBITED.

#### **§9.189 AUXILIARY ENGINES-GENERAL PROVISIONS FOR VEHICLE MOUNTING**

(a) This section includes provisions for the installation of equipment and mobile fuel containers on vehicles to supply LP-gas as a fuel to auxiliary engines and for other uses on these vehicles.

(b) Mobile fuel containers shall not exceed 500 gallons individual water capacity, 1,000 gallons aggregate capacity. All mobile fuel containers having 130 gallons water capacity or more shall be baffled and shall have steel pads continuously welded to the container and shall be supported through an arc of 120 degrees in such a manner as to prevent the concentration of excessive stresses in the shell plate of the container.

(c) Mobile fuel containers in excess of 250 gallons water capacity to be installed on truck beds to supply fuel to auxiliary engines or equipment (other than to propel vehicles) shall require the submission of plans and specifications to the Railroad Commission for prior approval. Plans and specifications shall be complete in all detail to indicate purpose and location of container mounting, as well as the complete layout of piping system, noting piping, valves, fitting material, brand name, and model number.

(d) Gas vaporizers, regulators and carburetion equipment to provide LP-gas as a fuel for auxiliary engines shall be installed in accordance with Division V of the LP-Gas Safety Rules.

(e) The source of air for combustion shall be completely isolated from the driver and passenger compartments, ventilation system or the air condition system.

#### **§9.190 FILLING OF MOTOR FUEL AND MOBILE FUEL CONTAINERS.**

(a) Filling of containers shall be done in a safe manner as provided in Sections 9.47-9.49 of this title (relating to filling density, transfer of liquid, and venting gas or liquid prohibited).

(b) Any vehicle used in public transportation service or any recreational vehicle shall not be refueled while occupied. Any vehicle containing appliances shall have all pilot lights extinguished prior to refueling. Signs shall be prominently displayed, stating:

(1) Turn off engine.

(2) Extinguish all pilot lights and open flames.

(3) Vehicles must be vacated during the filling process.

(c) The use of a vapor return coupling to vent LP-gas to the atmosphere is prohibited. This, however, does not prohibit the use of a vapor return hose to equalize pressure when properly connected between the supply container and the container to be filled.



## DIVISION VI

Division VI applies to Vaporizers for either portable, mobile, or stationary installations. All Basic Rules apply to this Division unless otherwise noted.

### §9.201. INDIRECT HEATING VAPORIZERS. [6.1]

(a) In domestic installations no liquid gas shall be led into buildings. All pressure reducing devices shall be installed outside of buildings except in the case of a vaporizer house.

(b) The vaporizer shall be located outside of buildings, except those buildings devoted exclusively to gas manufacturing and distribution operations, but may be located in a house or shed of fire resistive construction, well ventilated from points near the floor and roof.

(c) Vaporizers having a liquid capacity of one quart or less designed primarily for the purpose of domestic service employing artificial heat for vaporization and with vaporizer chamber integral may be installed in separate house or building used exclusively for this purpose or may be installed under a canopy type of protection. Units of this nature shall be so located that they will not be subject to tampering or mechanical injury.

(d) The device that supplies the necessary artificial heat for producing the steam, hot water or other heating medium shall be located in a separate compartment or room, which shall be separated from compartments or rooms containing liquefied petroleum gas vaporizers, pumps, or central gas mixing devices, by a substantially vapor-tight fire wall.

(e) If such house or shed is a lean-to or a building addition it shall be separated therefrom by a substantially vapor-tight fire wall.

(f) No gas in the liquid phase shall be piped into any building for fuel purposes other than those which are devoted exclusively to gas manufacturing or distribution operations of those used principally to house internal combustion engines.

(g) Gas, from the vaporizer or storage tank, if it is taken direct from the storage container in the gaseous phase, shall pass through a suitable regulator before entering the meter or the mixing device.

(h) In the case of vaporizers employing artificial heat, at or near discharge of vaporizer, a safety valve shall be provided having an effective discharge area as determined by the method described in Appendix B (§9.322).

(i) Each vaporizer utilizing artificial heat shall be permanently marked as follows:

(1.) with a marking signifying compliance with the rules of the Code covering specifications to which vaporizer is constructed.

(2.) with the working pressure in lb. per sq. in. gauge for which it is designed.

(3.) outside and inside heat exchange surface area.

(4.) the name and address of the manufacturer, and manufacturer's serial number.

(j) Artificially heated vaporizers shall be provided with suitable automatic means to prevent liquid passing from the vaporizer to the gas discharge piping.

### §9.202. ATMOSPHERIC VAPORIZERS. [6.2]

Atmospheric vaporizers employing heat from the ground or surrounding air shall be installed as follows:

(a) Such vaporizers shall be buried underground or installed inside of building provided that in case where vaporizer is installed inside of building the vaporizer capacity shall not exceed one quart.

(b) Vaporizers of less than one quart capacity heated by the ground or surrounding air need not be equipped with safety relief valve provided such equipment is approved by the Railroad Commission.

(c) All vaporizers shall be protected against tampering or mechanical injury.

(d) No gas in liquid phase shall be piped into any building for fuel purposes, except buildings devoted exclusively to gas manufacturing and distribution operations or buildings housing internal combustion engines.

#### **§9.203. DIRECT GAS FIRED VAPORIZERS. [6.3]**

(a) Direct gas fired vaporizers shall be constructed in accordance with the requirements of the A.S.M.E. Code applicable to the design of the particular vaporizer.

(b) Vaporizers may be directly connected to the liquid portion or the vapor portion of the storage container, or both.

(c) Vaporizers shall be located outside of buildings except those buildings devoted exclusively to gas manufacturing and distribution operations, but may be located in a separate house or shed of fire resistant construction, well ventilated at points near floor and roof.

(d) Vaporizers shall have at or near the discharge a safety relief valve providing an effective rate of discharge in accordance with Appendix B (§9.322), except as provided in §9.202(b) (6.2).

(e) Vaporizers shall be provided with an effective means of preventing liquid from passing from the vaporizer into the discharge gas piping.

(f) Vaporizers shall be provided with a means of manually turning off the gas to the main burner and pilot light.

(g) Vaporizers shall be equipped with automatic safety devices to shut off the flow of gas to the main burners if the pilot light should fail. Where the flow of gas through the pilot exceeds 2000 B.T.U. per hour the pilot shall also be equipped with an automatic shut off device.

(h) Pressure regulating and pressure reducing equipment, if located within 10 feet of a direct gas fired vaporizer, shall be separated from the open flame by a substantially air-tight fire resisting partition or partitions.

(i) Direct gas fired vaporizers or a container having such a vaporizer attached thereto shall be spaced from the nearest building or group of buildings in accordance with the provisions of §9.204(g) (6.4).

(j) No direct gas fired vaporizer shall raise the vapor pressure within the storage container to a pressure in excess of the design working pressure of the container.

#### **§9.204. DIRECT GAS FIRED TANK HEATERS. [6.4]**

(a) Direct gas fired tank heaters and tanks to which they are attached shall be installed only aboveground.

(b) Tank heaters shall be permanently marked with the name and address of the manufacturer.

(c) Tank heaters may be an integral part of a fuel storage container or a separate piece of equipment attached to the storage container by any means approved by the Railroad Commission.

(d) Tank heaters shall be provided with a means for manually turning off the gas to the main burner and pilot.

(e) Tank heaters shall be equipped with automatic safety devices to shut off the flow of gas to the main burners should the pilot fail. Where the flow of gas through the pilot exceeds 2000 B.T.U. per hour, the pilot shall also be equipped with an automatic shut-off device.

(f) Pressure regulating and pressure reducing equipment shall be separated from the open flame by a substantially air tight fire resisting partition or partitions.

(g) Containers and regulating equipment shall be located outside of buildings other than those specially provided for such purpose. Except as herein provided, each individual container shall be



located with respect to all buildings or group of buildings or to any railroad or highway right-of-way, or to any adjoining property line in accordance with the following table:

<b>Water Capacity of Container</b>	<b>MINIMUM DISTANCE</b>	
	<b>Aboveground</b>	<b>Underground</b>
0 to 500 Gallons	10 ft.	10 ft.
501 to 1200 Gallons	25 ft.	20 ft.
1201 to 2000 Gallons	50 ft.	35 ft.
Above 2000 Gallons	75 ft.	50 ft.

(h) Where the construction of a building or group of buildings will result in violation of the applicable distance requirement, all operations of the affected LP-gas installation shall cease immediately after construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (g) of this section.

(i) In the case of buildings devoted exclusively to gas manufacturing and distributing operations, the above distances may be reduced provided that in no case shall containers exceeding 500 gallons water capacity be located closer than ten feet to such gas manufacturing and distributing buildings.

(j) No direct fired tank heater shall raise the vapor pressure of the product within the storage container to a pressure exceeding the working pressure of the container.



## DIVISION VII

Division VII applies to piping and piping specifications and pipe fittings, and the requirements for proper installation and protection of piping installations. All Basic Rules apply to this Division unless otherwise noted.

### LOW PRESSURE GAS PIPING

Low pressure gas piping covers materials and installation methods for piping downstream from the first regulator, provided such first regulator reduces the pressure to 50 psi or less.

#### §9.211. PIPING INSTALLATION IDENTIFICATION TAG. [7.1]

(a) LP gas piping shall be installed, altered or repaired and tested only by those persons, firms, corporations or associations that have been licensed or who are master or journeyman plumbers exempt from licensing by the Railroad Commission of Texas, in accordance with the provisions of Chapter 113, Texas Natural Resources Code.

(b) Upon completion of the installation, alteration, or repair, and testing of a LP Gas piping system, the licensee shall attach to the end of the piping nearest the container a metal tag bearing the firm name of the licensee, his current license number, and the year the piping is installed, altered or repaired.

(c) The master or journeyman plumber exempt by §9.28, upon completion of the installation, alteration, repair or testing of a LP gas piping system, shall attach to the end of the piping nearest the container a metal tag bearing the master or journeyman plumber's name, state plumbing board number, and the year the piping is installed, altered, or repaired.

#### §9.212. SPECIFICATIONS FOR APPROVED PIPING MATERIALS. [7.2]

(a) All pipe, tubing, and fittings shall have a minimum design working pressure of 125 psi and shall be made of one or more of the following materials:

(1) Wrought iron or steel.

(2) Seamless copper or brass tubing or pipe.

(b) All valves and valve seats shall be approved for use with LP Gas.

(c) All unions shall be of the ground joint type.

(d) Valves designed for use with a slip-on hose connection are prohibited.

#### §9.213. CORROSION PROTECTION. [7.3]

All metallic piping installed underground, except copper, shall be protected against corrosion by the application of a commercially available, non-metallic, corrosion-resistant material specifically designed for this purpose. Exceptions can be granted to this requirement when adequate proof is submitted to the L.P.G. Division that the soil is non-corrosive.

#### §9.214. PIPING LAYOUT. [7.4]

(a) When piping is installed in attics or under floor areas, minimum ventilation shall be provided as follows: a minimum opening of 75 square inches free area on each of two sides shall be provided at the lowest possible point when the area of the building is 1500 square feet or less. For each additional 1,000 square feet of area, or fraction thereof, an additional 48 square inches free area shall be provided at the lowest possible point on each of two sides. When ventilating under floor areas, one of the above openings shall be at ground level at the lowest point of grade.

**Caution:** If the design and free area of grilles and louvers are not known, it may be assumed that wood louvers have 25% free area and metal louvers have 65% free area.

(b) Piping shall not be installed in any basement or semi-basement.

(c) Gas pipe or tubing may be installed in walls or partitions using the minimum number of connections. Bushings, groundjoint unions, or swing joints shall not be used within a wall. When a recessed wall furnace is installed, the test specified in §9.222(c) shall be used. Tubing installed inside walls or partitions, rather than through them, shall be protected against physical damage by means of a substantial covering, such as pipe. Pipe or tubing shall not be installed in the same stud space with electrical junction boxes or switches.

(d) Piping shall not be installed under a concrete floor slab, but may be installed in the upper half or above the slab.

(e) Swing joints, expansion coils, or loops, shall be used in piping systems in each instance where underground piping is brought aboveground and connected to building piping, or where undue stress of joints in rigid piping cannot be avoided. Swing joints shall not be used in piping inside buildings.

(f) Piping shall not be installed in areas subject to damage unless adequately protected.

#### **§9.215. JOINING METHODS. [7.5]**

(a) Wrought iron or steel pipe may be joined by threading, welding, or flanging.

(b) Fittings for copper or brass tubing shall be the flare type.

(c) Copper pipe may be joined with sweat joints using silver solder having a melting temperature of at least 1000° F.

#### **§9.216. DRAINAGE AND DRIPS. [7.6]**

(a) Drainage: All exposed piping exceeding 12 inches in length, including attic piping, shall be graded at least ¼" to ten feet so that any possible condensate will drain to underground piping.

(b) Drips: When drainage cannot be provided, a buried drip shall be installed at the lowest point of each trapped portion. Also, a buried drip shall be installed when a meter, regulator, or any other device is installed in exposed piping, when such device would prevent condensate from draining back to underground piping. A buried drip shall be of at least the same pipe size as the running line and shall extend to a minimum depth of 24 inches underground.

#### **§9.217. PIPING SUPPORT. [7.7]**

All horizontal runs of aboveground piping shall be supported by means of pipe hangers in accordance with the following table:

<b>Size of Pipe</b>	<b>Spacing of Hangers</b>
½ inch & less	6 feet
¾ to 1 inch	8 feet
1¼ inch & larger	10 feet

Other pipe shall be supported in such manner as to ensure that strain shall not be placed on the fittings.

#### **§9.218. EXTERIOR PIPING. [7.8]**

(a) Exterior piping installed underground shall be buried at least 18 inches, unless protected against mechanical injury by means of curbs, slabs, substantial posts or other suitable means.

(b) Exterior piping installed aboveground shall be protected against mechanical injury by means of curbs or substantial guard rails. Where risers are within 4 inches of building walls, protection for the risers shall not be deemed necessary.

**§9.219. JOINT COMPOUND. [7.9]**

Joint compound for use with LP Gas piping shall be of an approved type resistant to the action of LP Gases. Joint compound, where used, shall be used only on the male thread.

**§9.220. BENDING PIPE. [7.10]**

Gas pipe turns: Changes in direction of gas pipe may be made by use of fittings or by bends made under the following limitations:

- (a) Bends shall be made only with approved bending equipment and procedures especially intended for that purpose.
- (b) All bends shall be smooth and free from buckling, cracks, and other effects of mechanical damage.
- (c) Bends shall be permitted only in seamless steel pipe.
- (d) Pipe shall not be bent through an arc of more than 90°.
- (e) The inside radius of a bend shall be not less than six times the outside diameter of the pipe.
- (f) Lap or butt welded wrought iron or steel pipe shall not be bent. Where a change in direction of such pipe is necessary, proper fittings shall be used.

**§9.221. CAP OUTLETS. [7.11]**

- (a) All gas outlets shall be capped with a threaded metal plug or cap immediately upon installation and shall be left capped until the gas cock is installed.
- (b) After a gas cock is installed, it must either be connected to an appliance or capped with a threaded cap.

**§9.222. PRESSURE TEST OF PIPING. [7.12]**

- (a) After the piping installation is completed, but before the gas cocks are installed, the piping shall be tested only with LP Gas or air at a pressure of 15 pounds per square inch. There shall be no loss of pressure on the gauge or manometer for a period of thirty (30) minutes. The source of pressure shall be disconnected before pressure tests are made.
- (b) After the gas cocks are installed, the complete installation shall again be tested only with LP Gas or air at a pressure of five (5) pounds per square inch. There shall be no loss of pressure shown on the gauge or manometer for a period of fifteen (15) minutes. The source of pressure shall be disconnected before pressure tests are made.
- (c) Whenever appliances are installed at the same time as piping installation, a final pressure test shall be made in accordance with the following: The system (*including appliance valves*) shall stand a pressure of not less than 10 inches or more than 14 inches water column (*8 ounces per square inch*) for a period of not less than fifteen (15) minutes without showing any drop in pressure. Such pressure tests shall be measured with an instrument capable of measuring within the above specified pressure range.
- (d) Care must be taken in making these tests to insure that the temperature of the piping installation is not rising in order that the resultant rise in pressure will not mask small leaks.

**HIGH PRESSURE GAS PIPING**

High pressure gas piping covers gas piping for conveying vapor or liquid LP Gas from the supply tank to the first stage regulator with pressures in excess of 50 psi.

**§9.223. SPECIFICATIONS FOR APPROVED PIPING MATERIALS. [7.13]**

- (a) Pipe shall be ASTM Steel Schedule 80, or better.

- (b) Copper or brass tubing shall be type "K" or "L" with a minimum wall thickness of .032".
- (c) All pipe fittings shall be forged steel, stamped 2000 psi or greater.
- (d) Approved POL and pigtail assemblies.

**§9.224. JOINING OF HIGH PRESSURE PIPING. [7.14]**

All high pressure piping shall be joined by welding, threading, flaring, or flanging, and all such piping shall be gas tight.

## DIVISION VIII

### APPLIANCE INSTALLATION

Division VIII applies to the location, installation, and connection of approved appliances and pertinent equipment used in making appliance installations including the venting of appliances.

#### **§9.231. APPROVED APPLIANCES. [8.1]**

(a) All LP-gas appliances shall be approved by the Railroad Commission or certified by a nationally recognized testing laboratory, such as American Gas Association, Inc., or Underwriters' Laboratories, Inc. If such gas appliances are not certified for use with LP-gas they may be converted to use LP-gas as a fuel by a licensed dealer or master or journeyman plumber, provided he tests such appliances for proper operation before placing them in service.

(b) Upon completion of the conversion and testing of LP-gas appliances, the licensee shall attach to each such appliance a metal tag bearing the words: "Converted to LP-Gas", the licensee's name and LP-gas license number, and the year the appliance is converted.

(c) The master or journeyman plumber exempt by §9.28 upon completion of the conversion and testing of LP-gas appliances, shall attach to each such appliance a metal tag bearing the words: "Converted to LP-Gas", the master or journeyman plumber's name, his state plumbing board number, and the year the appliance is converted.

#### **§9.232. INSTALLATION OF APPLIANCES. [8.2]**

Appliances shall be installed according to their listings and manufacturer's instructions.

#### **§9.233. AUTOMATIC SHUT-OFF DEVICES. [8.3]**

Automatic shut-off devices of the complete shutoff type (100% safety shut-off) shall be installed on automatically controlled appliances except domestic ranges and commercial cooking equipment having pilot input ratings of 500 BTU per hour or less.

#### **§9.234. ROOM HEATERS IN PUBLIC BUILDING. [8.4]**

Room heaters installed in transient sleeping quarters, schools, homes for the aged, sanatoriums, convalescent homes, orphanages, and other institutions of this type shall be vented, and equipped with a 100% safety shutoff device.

#### **§9.235. PROVISION FOR COMBUSTION AIR. [8.5]**

Gas appliances installed in rooms where ventilation is insufficient to allow adequate air for complete combustion, under conditions of maximum demand, shall be provided sufficient air by the installation of a louver or other means to provide one square inch of free area per 1000 BTU of appliance rating.

#### **§9.236. OPEN FLAME APPLIANCES. [8.6]**

Open flame appliances shall be installed in a manner to avoid a hazard to surrounding combustible materials.

#### **§9.237. TESTING APPLIANCES. [8.7]**

Before placing any appliance in service, it shall be tested for leaks and normal operation.

#### **§9.238. APPLIANCES MADE FOR VENTING. [8.8]**

All appliances made for venting shall be vented to the outside atmosphere.

### §9.239. APPLIANCE CONNECTORS. [8.9]

(a) Maximum length of appliance connectors shall be six feet. If an appliance is to be installed more than six feet from existing piping, additional piping shall be installed in accordance with Division VII.

(b) A flexible or semi-flexible connector shall consist of approved copper tubing, type "K" or "L", corrugated copper or brass connectors, flexible LP Gas hose of 125 psi working pressure, or greater, equipped with approved end fittings.

(c) All appliances of 200,000 BTU input or less shall be connected to supply piping with an approved flexible or semi-flexible connector.

(d) All appliance connectors shall be attached by means of a threaded fitting or a listed quick disconnect device. Slip-on type connectors are prohibited.

(e) Any appliance connected to a piping system shall have an accessible manual shut-off valve installed upstream of the union or connector and within six feet of the appliance it serves. Appliance connectors may be connected to the building piping by means of a listed quick disconnect device, and when installed indoors, a manual shutoff valve shall be installed immediately upstream of the quick disconnect device.

### §9.240. WATER HEATERS. [8.10]

A temperature and pressure relief valve shall be installed on all water heaters.

### §9.241. APPLIANCE REPAIRS AND CONVERSIONS. [8.11]

All appliance installations, alterations, repairs, and conversions shall be made in a workmanlike manner.

### §9.242. VENTING OF APPLIANCES DEFINITIONS. [8.12]

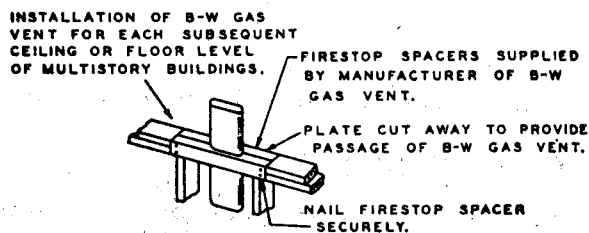
(a) Venting system: A continuous open passageway from the flue collar or draft hood of a fuel burning appliance to the outside atmosphere for the purpose of removing products of combustion.

(b) Types of approved venting materials

(1) Type "B" is an UL listed vent pipe, marked as Type B, generally of double wall construction, round or oval, with an aluminum liner.

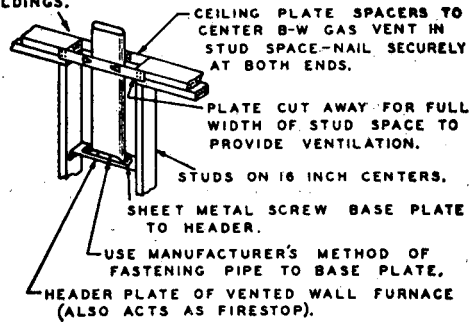
(2) Type "BW" is an UL listed vent pipe, marked as Type BW, of oval double wall construction with an aluminum liner, used with fire stops and other listed components for venting gas appliances in walls. (See Figure 1.)

(3) Type "L" is an UL listed vent pipe, marked as Type L, of round, double wall construction with an inner lining of stainless steel.





**INSTALLATION OF B-W GAS VENT FOR ONE STORY BUILDINGS OR FOR FIRST FLOOR OF MULTI-STORY BUILDINGS.**



**Figure 1. Installation of Type B-W Gas vents for Vented Wall Furnaces.**

**(c) Types of chimneys**

- (1) Factory-built chimneys are composed of UL listed components, marked "Factory-built", of round, multi-wall construction.
- (2) Masonry chimneys are composed of solid brick, stone, or concrete with a suitable liner.
- (3) Metal chimneys shall be made of 10 gauge or heavier metal or of UL listed components.

**§9.243. MINIMUM SAFE PERFORMANCE. [8.13]**

- (a) Venting systems shall be designed and constructed so as to develop a positive flow adequate to remove flue gases to the outside atmosphere.
- (b) A venting system shall be deemed to meet minimum safe performance standards when, after the appliance or appliances have been placed in operation, air can be shown to be flowing into the draft hoods around their entire perimeter.

**§9.244. APPLIANCES TO BE VENTED AND APPROVED VENTING SYSTEMS. [8.14]**

- (a) All gas appliances capable of using solid and liquid fuels, such as incinerators, or any appliance producing vent gases in excess of 550° F (*measured at the outlet of the draft hood*), shall be vented through factory-built, masonry, or metal chimneys or Type L venting systems.
- (b) Clothes dryers shall be exhausted to the outside atmosphere. This may be done with single wall or flexible duct or venting systems. Gas appliance vents shall not be connected to exhaust ducts from clothes dryers.
- (c) All other appliances, with draft hoods, listed as vented appliances, shall be vented with listed Type B, BW, or Type L venting systems or chimneys

**§9.245. MAXIMUM UNVENTED BTU INPUT. [8.15]**

The total unvented BTU input into any enclosed space shall not exceed 30 BTU per hour per cubic foot of enclosed volume.

**§9.246. INSTALLATION. [8.16]**

- (a) Type B, BW, and Type L venting systems shall be installed in accordance with the terms of their respective listings and the manufacturer's instructions.
- (b) Venting systems shall not extend into, nor pass through, any circulating air duct or plenum.
- (c) Venting systems shall be sized in accordance with approved engineering methods or, as an alternate

method for sizing an individual vent for a single appliance only, the effective area of the venting system shall be not less than the area of the appliance draft hood outlet. As an alternate method for sizing a venting system connected to more than one appliance, the effective area of the vent shall be not less than the area of the largest draft hood outlet plus 50% of the areas of additional draft hood outlets.

(d) The vent pipe of a venting system shall extend continuously through the roof flashing and shall terminate with an UL listed cap.

(e) All portions of venting systems shall be adequately supported.

(f) Venting systems shall extend not less than 5 feet in vertical height above the highest connected appliance draft hood. Wall furnace venting systems shall extend a minimum of 12 feet above the bottom of the furnace.

(g) Sealed combustion appliances having integral (built-in) venting systems shall be installed in accordance with their listings and the manufacturer's instructions.

(h) A vent connector shall not be connected to a fireplace chimney unless the fireplace opening is permanently sealed. Before connecting a venting system to any chimney, the chimney shall be inspected and found free of obstructions.

(i) Type B, BW, and Type L venting systems shall terminate in a listed cap, marked "UL". Figure 2 on page 99 shall determine the minimum height a venting system shall extend above a roof surface.

**§9.247. POWER VENTING. [8.17]**

(a) Gas appliances, except incinerators, requiring venting may be vented by means of mechanical draft systems of either forced or induced systems.

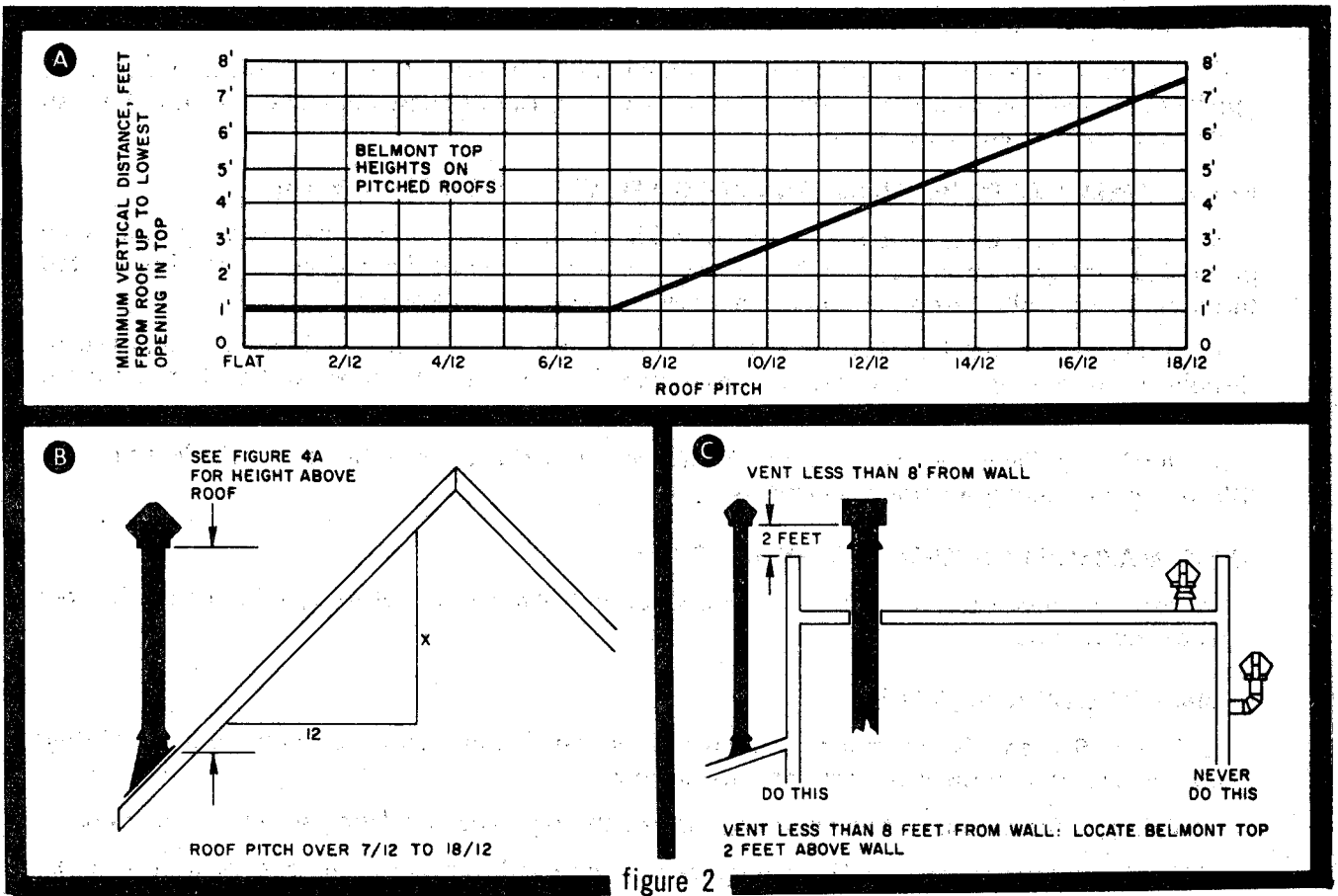


figure 2

- (b) All portions of such systems under positive pressure shall be designed, constructed, and installed to prevent leakage of combustion products into a building.
- (c) Vents from other gas appliances shall not be connected into vents under positive pressure.
- (d) Gas appliances employing mechanical draft systems shall be provided with means to prevent the flow of gas to the main burner(s) when the mechanical draft system fails to provide proper draft.
- (e) The exit terminals of mechanical draft systems shall be located not less than 12 inches from any opening through which combustion products could enter the building, nor less than 2 feet from an adjacent building, and not less than 7 feet above grade when located adjacent to public walkways.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent data collection procedures and the use of advanced analytical techniques to derive meaningful insights from the data.

3. The third part of the document focuses on the implementation of data-driven decision-making processes. It describes how the organization uses the insights gained from data analysis to inform strategic planning and operational decisions, leading to improved performance and efficiency.

4. The fourth part of the document addresses the challenges and risks associated with data management. It discusses the importance of data security, privacy, and compliance with relevant regulations, and provides recommendations for mitigating these risks.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It emphasizes the ongoing nature of data management and the need for continuous improvement and innovation in the field.

## DIVISION IX

### LIQUEFIED PETROLEUM GAS BOTTLE FILLING PLANTS AND SERVICE STATIONS

Division IX applies specifically to storage containers and dispensing devices and pertinent equipment in Bottle Filling Plants and Service Stations where Liquefied Petroleum Gas is stored and dispensed from fixed LP Gas equipment. All Basic Rules apply to this Division unless otherwise noted in the Basic Rules or in this Division. Containers and pertinent equipment shall comply with the requirements as outlined herein as well as with the requirements of local regulatory bodies where the bottle filling plant and service station will be constructed. NOTE: *Dispensing equipment shall mean pumps, metering devices, and other associated facilities.*

#### §9.261. DESIGN WORKING PRESSURE AND CLASSIFICATION OF BOTTLE FILLING AND L. P. GAS SERVICE STATION STORAGE CONTAINERS. [9.1]

(a) The design working pressure of motor fuel and bottle filling storage containers shall be in accordance with the following schedule:

Container Classification Type	For Gases With Vapor Pressure Not to Exceed _____ lbs. per sq. in. Gauge at 100° F.	Minimum Design Pressure of Container By: A.S.M.E. Code
200 lb.	200	200 lb. Ga.
250 lb.	250	250 lb. Ga.

(b) The shell or head thickness of any container shall not be less than 3/16 inch.

(c) All nozzle openings in shells or heads of A.S.M.E. vessels shall be a minimum of either 3,000 pounds couplings or Schedule 80 pipe. Such nozzle openings shall be installed by licensed fabricator before testing.

(d) Containers to be fabricated by fusion welding only.

(e) Lugs, brackets, or similar attachments to container shall be attached by the container manufacturer before testing. Field welding on pressure parts is prohibited.

#### §9.262. FUEL STORAGE CONTAINER VALVES AND ACCESSORIES. [9.2]

(a) The filling pipe inlet terminal shall not be located inside a building and such terminal shall be located not less than 10 feet from any building, and shall have adequate protection against collision by substantial guard rails or concrete.

(b) The filling connection shall be fitted with one of the following:

(1) Combination back-pressure check valve and excess flow valve.

(2) One double or two single back-pressure check valves.

(3) A positive shut-off valve, in conjunction with either:

(a) An internal back pressure valve, or

(b) An internal excess flow valve.

(c) When the length of pipe from the container to the filling pipe inlet terminal is in excess of 15 feet, or the container is not directly accessible from the filling pipe inlet terminal, the filling pipe inlet terminal shall be fitted with a positive shut-off valve in conjunction with either:

- (1) A back-pressure check valve, or
- (2) An excess flow check valve.

(d) All openings in a container shall be equipped with approved automatic excess flow or back-pressure check valves except the following: Safety relief connections, liquid level gauging devices, and pressure gauge connections.

(e) All inlet and outlet connections except safety relief valves, liquid level gauging devices and pressure gauges on storage containers shall be permanently marked "vapor" or "liquid" to designate whether they communicate with vapor or liquid space. Labels shall be on both containers and valves.

(f) All connections to containers shall have approved shut-off valves located as close to the container as practicable, except safety relief connections, gauging devices, filler valves, and vapor return valves.

(1) Filling and vapor return connections shall be provided with approved automatic double check valves to prevent back flow in case the filling connections are broken.

(2) All other connections to containers except safety relief, filling, and liquid level gauging connections, shall be equipped with approved automatic excess flow valves.

(g) Each storage container shall be provided with an approved pressure gauge.

#### **§9.263. SAFETY DEVICES GENERAL. [9.3]**

(a) All containers shall be equipped with safety relief devices that comply with the following:

(1) All container safety relief devices shall be located on the containers and shall have direct communication with the vapor space of the container.

(2) Safety relief device discharge pipes shall be located so as to be protected against physical damage and such discharge pipes shall be fitted with loose fitting raincaps. Return bends and restrictive pipe fittings shall not be permitted.

(3) Where there is a possibility of the discharge from any safety relief valve creating a hazardous condition in an adjacent building by entering openings in such buildings, the discharge pipe shall be extended vertically upward to a point which will insure thorough dissipation of all escaping gas before it can reach the openings in the building.

(b) Aboveground containers - - Safety devices for aboveground containers shall be provided as follows:

(1) Containers installed aboveground shall be provided with one or more safety relief valves that shall have the rate of discharge specified in Appendix A (§9.321).

(2) Discharge from safety relief valves on L.P. Gas Service Station and Bottle Filling Plant storage containers shall be vented to a point at least 10 feet vertically upward above the containers. Such vents shall be of sufficient size to not restrict the discharge capacity of the valve and shall be fitted with loose raincaps of a type which will allow free discharge at all times.

(c) Underground containers.

(1) Containers which are intended only for underground installation may be equipped with approved spring loaded relief valves having not less than 30% of capacity specified in Appendix A (§9.321). Containers designed for underground installation shall not contain liquid fuel at any time when such containers are above ground or uncovered.

(2) Discharge from safety relief valves on L.P. Gas Service Station and Bottle Filling Plant storage containers shall be vented to a point at least 10 feet vertically upward above the ground. Such vents shall be of sufficient size to not restrict the discharge capacity of the valve and shall be fitted with loose raincaps of a type which will allow free discharge at all times.

**§9.264. CAPACITY OF L.P. GAS SERVICE STATION AND BOTTLE FILLING STORAGE. [9.4]**

No storage container or combination of containers shall exceed 8,000 standard U.S. Gallons water capacity.

**§9.265. INSTALLATION OF L.P. GAS SERVICE STATION AND BOTTLE FILLING STORAGE CONTAINERS. [9.5]**

(a) Location of containers:

(1) Fuel storage containers may be located within the corporate limits of any city or town, provided the installation meets the requirements of the LP Gas Division of the Railroad Commission.

(2) All fuel storage containers shall be located outside buildings and shall be located with respect to the nearest building or group of buildings or the nearest railroad or highway right-of-way or to any adjoining property line in accordance with the following table:

<b>Total Aggregate Water Capacity of Storage</b>	<b>Minimum Distance</b>
0 through 500 gallons	10 feet
501 through 2000 gallons	12 feet
2001 through 4000 gallons	20 feet
4001 through 6500 gallons	35 feet
6501 through 8000 gallons	50 feet

(3) Where the construction of a building or group of buildings will result in violation of the applicable distance requirement, all operations of the affected LP gas installation shall cease immediately after construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (a) (2) of this section.

(4) Prior to the installation of an LP Gas Service Station and/or Bottle Filling Plant, plans and manufacturer's data report(s) shall be submitted to the LP Gas Division of the Railroad Commission for examination and tentative approval. Plans shall include distances from containers to all buildings. Plans covering installations located within the corporate limits of any city or town shall be accompanied by a written waiver signed by the city official authorized to sign such instruments. Upon completion of the examination of the plans, a copy of the proposed plans will be returned, marked for corrections or tentative approval by the LP Gas Division. Final approval will follow a physical inspection of the completed installation by an inspector of the LP Gas Division.

(5) Due diligence shall be exercised by trained personnel in the maintenance of such storage locations; and in the operation of equipment during the filling of, and dispensing from, storage containers; and in the protection of containers and equipment against mechanical injury or against tampering by unauthorized persons.

(b) Aboveground containers. **REV. 9/82**

(1) Containers may be mounted horizontally or vertically.

(2) Aboveground containers and dispensing equipment shall be so located to prevent damage from vehicles and shall be protected on all sides by crash rails or guard posts of a minimum of three inch steel pipe set in two feet of concrete. The distance between posts shall not be more than four feet. No post shall be less than three feet from container.

(3) All fuel storage containers shall be mounted on substantial masonry supports or structural steel supports on substantial masonry footings. Fuel storage containers in excess of 1200 w.g.

capacity shall be supported through an arc of 120° to prevent the concentration of excessive stresses in the shell plate of the container.

(4) All fuel storage containers shall be grounded by a separate and adequate ground. The use of connecting piping shall not be considered as an adequate ground. This ground shall consist of either a ground rod or a metal grid buried to a sufficient depth to insure grounding of any static charge generated, and connected to the tank by means of a copper wire or wires equivalent in area to a Number 10 AWG wire. This ground wire to be attached by any means that will insure a good electrical bond, preferably by soldering.

(5) Fuel storage containers shall not be placed under an electric transmission line. All storage containers shall be so placed in regard to electric transmission lines that in the event of the breakage of any conductor, the broken ends will not contact the container.

(6) All fuel storage containers shall be painted a heat reflecting color, either white or aluminum. Painting containers red or other heat absorbing colors is prohibited.

(7) All fuel storage installations shall be lettered in letters not less than four (4) inches high to indicate the name of the licensee operating the installation. Each tank shall be lettered to indicate the nature of contents. The above lettering shall be so placed as to be readily visible to the public.

(8) Areas occupied by fuel storage containers shall be kept cleared of combustible materials within a radius of 25 feet around the containers.

(c) Underground containers.

(1) As a means of resisting corrosion and prior to being placed underground, the container shall be given a suitable protective coating consisting of a suitable metal priming, followed by a coating of anticorrosive mastic enamel or paint.

(2) Underground containers shall be set on a firm foundation and surrounded with soft earth or sand firmly tamped in place.

(3) Container locations subject to vehicular traffic shall be buried four feet and shall be protected by a concrete slab or other adequate cover to prevent the weight of a loaded vehicle imposing concentrated direct loads on the container shell. Where ground conditions make compliance with this requirement impracticable, installation shall be made otherwise to prevent physical damage.

**§9.266. PROTECTION OF STORAGE CONTAINERS AND FITTINGS. [9.6]**

(a) Areas occupied by LP Gas Service Station and Bottle Filling Plant storage containers, valves, gauges, pumps, and other fittings shall be enclosed by a substantial heavy weight woven or welded wire fence of not less than 14½ American Wire gauge at least 5 feet high, topped by three (3) strands of barbed wire spaced 4 inches apart. All uprights and braces shall be of noncombustible material. This enclosure shall be provided with a locked entrance to prevent tampering by unauthorized persons. Fencing shall not be installed closer than 3 feet to the tank at any point.

(b) Upon application to the Commission an exception to the fencing requirements may be granted for completely self-contained and securely housed LP Gas service station or bottle filling units. Such units shall have been specifically approved for this use by the Railroad Commission in accordance with plans and specifications covering the design, fabrication, assembly and method of mounting. Such units shall be locked when not in use.

**§9.267. TRANSPORT TRUCK UNLOADING LOCATION. [9.7]**

The transport truck during unloading shall be located so as to be clear of public thoroughfare traffic.

**§9.268. PIPING, VALVES, AND FITTINGS. [9.8]**

(a) Piping may be underground, aboveground, or both, and shall be well supported and protected



against physical damage and corrosion. A safety relief valve shall be installed in all lines that have a positive shut-off at each end.

(b) When piping is laid beneath driveways, it shall be run through a protective conduit, such as oversized pipe, to prevent physical damage by vehicles using the driveway.

(c) Piping shall be of Schedule 80 Steel. Pipe joints may be screwed, flanged or welded.

(d) All shut-off valves (liquid or vapor) shall be suitable for liquefied petroleum gas service and designed for a rated working pressure of at least 250 psi.

(e) All materials such as valve seats, packing, gaskets, diaphragms, etc., shall be of a material which is resistant to the solvent action of liquefied petroleum gas under the service conditions to which they are subjected.

(f) Fittings shall be of forged steel having a minimum working pressure of 2000 lbs.

(g) All piping and fitting assemblies shall be tested after assembly and proved free from leaks at not less than normal operating pressures.

(h) Joint compound for use with liquefied petroleum gas piping shall be of an approved type resistant to the action of liquefied petroleum gases. Joint compound where used, shall be used only on the male thread.

#### **§9.269. PUMPS AND PUMP ACCESSORIES. [9.9]**

All pumps and pump accessory equipment (liquid or vapor) shall be of a type suitable for liquefied petroleum gas service, and designed for not less than 250 psi. Accessories shall have a minimum rated working pressure of 250 psi. Positive displacement pumps shall be equipped with suitable pressure actuated by pass valves permitting flow from pump discharge to storage container.

#### **§9.270. DISPENSING DEVICES. [9.10]**

(a) Meters, vapor eliminators, if used, valves, and fittings, in the dispenser shall be of a type suitable for L P Gas service and shall be designed for a minimum working pressure of 250 psi.

(b) L P Gas shall be transferred from the storage tanks by means of pumps so designed and equipped as to allow control of the flow and to prevent leakage or accidental discharge. A supplemental remote control shall be provided outside the dispensing device whereby the source of power to the pump may be readily shut off in the event of fire or other accident.

(c) A remote control shut-off valve or an excess flow check valve is required at the dispenser inlet.

(d) Dispensing Hose Specifications. (See *Basic Rules*, §9.54 (a) through (e).)

(1) Hose unions shall be of substantial construction and shall be maintained in a safe condition.

(2) Hose used for transferring liquid from one container to another shall be equipped with suitable shut-off valves at discharge end. Provision shall be made to prevent excessive hydrostatic pressure in the hose by installation of an approved spring loaded relief valve, or an approved by pass valve communicating directly with the tank.

(e) Location.

(1) L P Gas dispensers shall be placed in a separate location, entirely removed from units dispensing other fuels, and shall be locked when not in use.

(2) L P Gas dispensing devices shall be installed on a concrete island or as part of a complete storage and dispensing assembly and shall be adequately protected from physical damage by crash posts or guard rails.

(3) L P Gas dispensing devices shall not be installed within the confines of a building or any other enclosed area which is conducive to the collection of vapors; nor shall motor vehicles be serviced from LP Gas dispensers within such confined areas.

(4) L P Gas dispensing devices shall be equipped with a ground cable that is to be attached to all vehicles before fueling.

**§9.271. EXTINGUISHERS REQUIRED [9.11]**

Each installation shall be provided with at least two hand fire extinguishers, one of a type and size not less than 5 lbs. capacity, and one of 15 or 20 lbs. capacity, suitable for extinguishing LP Gas fires. Extinguishers shall be at all times fully charged and shall be kept in good mechanical condition.

**§9.272. CYLINDER STORAGE. [9.12]**

ICC and DOT cylinders that have been in service shall not be stored closer than 10 feet to any building or group of buildings or to any line of adjoining property. Cylinders in storage shall be protected against tampering by unauthorized persons. Cylinder storage areas shall be enclosed by a substantial heavy weight woven or welded wire fence of not less than 14½ American Wire gauge at least 5 feet high, topped by three (3) strands of barbed wire spaced 4 inches apart. All uprights and braces shall be of non-combustible material. This enclosure shall be provided with a locked entrance.

**§9.273. ELECTRICAL INSTALLATIONS. [9.13]**

All electrical installations within the immediate vicinity of fuel storage containers or L P Gas handling equipment such as pumps, meters, and filling connections shall be made in strict accordance with the National Electrical Code for Class I, Group D, Hazardous Locations.

**§9.274. MAINTENANCE OF FUEL STORAGE CONTAINERS. [9.14]**

All liquefied petroleum gas fuel storage containers, valves, accessories, and transfer equipment shall be maintained in good mechanical condition at all times and the area surrounding the containers shall be maintained so as to eliminate insofar as possible all hazards to a safe operation.

**§9.275. SAFETY [9.15]**

There shall be no smoking on the driveway of service stations or bottle filling plants in the dispensing areas or transport truck unloading areas. Conspicuous signs prohibiting smoking shall be posted within sight of the customer being served. Letters on such signs shall be not less than 4 inches high. The motors of all vehicles being fueled shall be shut off during the fueling operations.

## DIVISION X

Division X applies to Farm Carts for the transportation and distribution of liquefied petroleum gases for farm and other non-highway use. All Basic Rules apply to this Division unless otherwise noted.

### §9.281. SAFETY DEVICES. [10.1]

*(Repealed March, 1983)*

### §9.282. PROTECTION OF VALVES AND ACCESSORIES. [10.2]

All valves, relief valves, pumps, and piping which are a part of Farm Cart tanks used in the transportation of liquefied petroleum gases shall be located and/or protected by recessing or by heavy guard rails so as to provide maximum protection against breaking off or dislocation in case of an accident.

### §9.283. CONTAINER VALVES AND ACCESSORIES. [10.3]

(a) The discharge outlet shall be provided with a suitable automatic excess flow valve.

(b) Filling and vapor return connections shall be provided with approved automatic valves to prevent back flow in case the filling connection is broken.

(c) All other connections to containers, except safety relief filling and liquid level gauge connections, shall be equipped with approved automatic excess flow valves.

(d) All container inlets and outlets, except safety relief valves, liquid level gauging devices, and pressure gauges, shall be labeled to designate whether they communicate with vapor or liquid space. Labels may be on valves.

### §9.284. PIPINGS AND FITTINGS. [10.4]

(a) All piping, tubing, and fittings shall be securely mounted and shall be amply protected against damage and breakage.

(b) All piping and fittings shall be extra heavy steel. The use of cast iron fittings is prohibited.

(c) Any portion of either piping or hose which may at any time be closed at both ends shall be equipped with a suitable spring loaded relief valve, or an approved spring loaded by-pass valve communicating directly with the tank.

### §9.285. TRANSFER OF LIQUIDS. [10.5]

(a) Liquid may be transferred from one tank to another by means of any of the following methods:  
Pumping  
Pressure Differential  
Gravity

(b) Pumps, where used, shall be of an approved type and may be either trailer mounted or stationary.

(c) Where pressure differential is used to transfer liquid, such differential shall be obtained only with liquefied petroleum gas.

(d) During the process of transferring liquid at least one operator shall remain in the immediate vicinity of the filling connection at all times.

(e) During the process of transferring liquids, neither open flames nor non-explosion proof lights shall be allowed in the immediate vicinity of the transfer. Smoking shall not be allowed anywhere in the immediate vicinity during the process of transferring liquid.

(f) Farm Cart containers shall be loaded by weight, by meter or any approved liquid level gauging device.

**§9.286. FILLING CONTAINERS. [10.6]**

(a) Marketers and users shall not introduce a liquid petroleum gas, or a mixture thereof, into any container when the vapor pressure of such gas at 100° F. exceeds the design working pressure of the container.

(b) Farm Carts shall not be refilled on a public road or highway.

**§9.287. MOUNTING AND CONNECTING PUMPS. [10.7]**

(a) Pumps of approved design and properly protected may be mounted upon liquefied petroleum gas Farm Carts if the owner so desires.

(b) Such pumps shall be connected to the tank by means of an approved flexible connection to prevent undue stresses being imposed on the piping.

**§9.288. HOSE SPECIFICATIONS. [10.8]**

(See *Basic Rules*, §9.54.)

**§9.289. MOUNTING CONTAINERS. [10.9]**

(a) Farm Cart containers shall be mounted in steel cradles supporting the container through an arc of 120°. If welded to the container, such cradles may be installed only by an approved fabricator.

(b) Containers shall be mounted on farm cart frame by suitable hold down bolts or other approved means and shall be provided with stubs to prevent shifting on such frames. U-bolts or J-bolts are not approved.

**§9.290. LIQUID LEVEL GAUGING DEVICES. [10.10]**

Each Farm Cart container shall be equipped with an accurate liquid level gauging device of approved design; for example, a rotary gauge, slip tube, or a fixed tube device. A fixed tube device consists of a dip pipe of small size, equipped with a valve at the outer end. Fixed tube devices shall be so arranged that the maximum liquid level to which a container may be filled is not in excess of the maximum permitted under the filling density table in §9.47, but, based on an initial temperature not to exceed 40° F. Liquid level gauging devices of the rotary tube and slip tube type may be used without installation of an excess flow valve, provided that the bleed valve opening is not larger than a No. 54 drill size. (*Refer to Appendix C (§9.323) for method of calculating length of fixed tube.*)

**§9.291. DESIGN WORKING PRESSURE AND CLASSIFICATION OF CONTAINERS. [10.11]**

(a) All containers installed and used as farm carts shall be constructed in accordance with Division I, Section VIII of the edition of the A.S.M.E. Boiler and Pressure Vessel Code in effect at the time of construction. The minimum design working pressure for farm cart containers shall be not less than 200 lbs. per square inch gauge.

(b) The shell and heads of farm cart containers shall be not less than 3/16 inch thickness and shall be joined together by fusion welding.

(c) All nozzle openings in shell or head of containers shall be either 3000 lb. couplings or Schedule 80 pipe. Such nozzle openings shall be installed by the container manufacturer before testing.

(d) Farm cart containers in excess of 500 w.g. capacity shall be equipped with suitable baffles.

**§9.292. LIQUEFIED PETROLEUM VEHICLE IDENTIFICATION. [10.12]**

Vehicle Identification, L.P.G. Form No. 4, and authority created thereby to transport liquefied petroleum gas, is not applicable to liquefied petroleum gas farm carts.

**§9.293. TRANSPORTATION OF L. P. GAS TRACTOR FUEL. [10.13]**

(a) L.P. Gas tractor motor fuel shall be transported from the source of supply to the place of consumption only, by LP Gas licensees or their authorized representatives.

(b) Means of tractor fuel transportation shall be by containers and equipment, approved by the Railroad Commission.

**§9.294. PAINTING. [10.14]**

All farm cart containers shall be finished with a heat reflecting surface, either white or aluminum, and shall be maintained in good condition.



## DIVISION XI

Division XI applies to industrial fork lift trucks and other L P Gas powered vehicles and carburetion equipment designed to be used in a building or on the premises. All Basic Rules apply to this Division unless otherwise noted.

### §9.301. FUEL STORAGE CONTAINERS. [11.1]

#### (a) Location of Fuel Storage Containers.

(1) Fuel storage containers may be located within the corporate limits of any city or town, provided the installation meets the requirements of the LP Gas Division of the Railroad Commission.

(2) All fuel storage containers shall be located outside of buildings and shall be located with respect to the nearest building or group of buildings or the nearest railroad or highway right-of-way or to any adjoining property line in accordance with the following table:

Water Capacity of Container	Minimum Distance
Up to 500 gallons	10 feet
501 to 2000 gallons	12 feet
2001 to 4000 gallons	20 feet
4001 to 6500 gallons	35 feet
6501 to 8000 gallons	50 feet

**No fuel storage container or combination of containers shall exceed 8,000 standard U.S. Gallons water capacity.**

(3) Where the construction of a building or group of buildings will result in violation of the applicable distance requirement, all operations of the affected LP-gas installation shall cease immediately after construction begins and any product stored at the installation removed until such time, if any, that the installation is relocated in conformity with subsection (a)(2) of this section.

(4) Prior to the installation of an LP Gas fuel storage container, plans and manufacturer's data report(s) shall be submitted to the LP Gas Division of the Railroad Commission for examination. Plans shall include distances in all directions from all containers to all buildings. Plans covering installations located within the corporate limits of any city or town shall be accompanied by a written waiver signed by the City official authorized to sign such instruments. Upon completion of the examination, a copy of the proposed plans will be returned, marked for correction or tentative approval by the LP Gas Division. Final approval will follow a physical inspection of the completed installation by an inspector of the LP Gas Division.

(5) Due diligence shall be exercised by trained personnel in the maintenance of such storage locations; and in the operation of equipment during the filling of and dispensing from storage containers; and in the protection of containers and equipment against mechanical injury or against tampering by unauthorized persons.

#### (b) Installation of Fuel Storage Containers. REV. 9/82

(1) Containers and dispensing equipment shall be so located to prevent damage from vehicles and shall be protected on all sides by crash rails or guard posts of a minimum of three inch steel pipe set in two feet of concrete. The distance between posts shall not be more than four feet. No post shall be less than three feet from container.

(2) All fuel storage containers shall be mounted on substantial masonry supports or structural steel supports on substantial masonry footings. Fuel storage containers in excess of 1200 w.g. capacity shall be supported through an arc of 120° to prevent the concentration of excessive stresses in the shell plate of the container.

(3) All fuel storage containers shall be grounded by a separate and adequate ground. The use of connecting piping shall not be considered as an adequate ground. This ground shall consist of either a ground rod or a metal grid buried to a sufficient depth to insure grounding of any static charge generated, and connected to the tank by means of a copper wire or wires, equivalent in area to a Number 10 AWG wire. This ground wire to be attached by any means that will insure a good electrical bond, preferably by soldering.

(4) Fuel storage containers shall not be placed under an electric transmission line. All storage containers shall be so placed in regard to electric transmission lines that in the event of breakage of any conductor, the broken ends will not contact the container.

(5) All fuel storage containers shall be painted a heat reflecting color, either white or aluminum. Painting containers red or other heat absorbing colors is prohibited.

(6) Areas occupied by storage containers shall be kept clear of combustible materials within a radius of 25 feet around the container.

### **§9.302. PROTECTION OF FUEL STORAGE CONTAINERS AND FITTINGS. [11.2]**

Areas occupied by L P Gas fuel storage containers, valves, gauges, pumps, and other fittings shall be enclosed by a substantial heavy weight woven or welded wire fence of not less than 14½ American Wire gauge at least 5 feet high, topped by three (3) strands of barbed wire spaced 4 inches apart. All uprights and braces shall be of non combustible material. This enclosure shall be provided with a locked entrance to prevent tampering by unauthorized persons. Fencing shall not be installed closer than 5 feet to the tank at any point. This fence shall be maintained in good condition at all times. Completely self-contained and securely housed L P Gas fuel storage units which have been approved for use by the Railroad Commission of Texas, and are locked when not in operation, may be excepted from such fencing requirements.

### **§9.303. CYLINDER STORAGE. [11.3]**

#### **(a) Storage indoors.**

(1) The quantity of LP Gas stored within buildings frequented by the public shall be confined to the actual cylinders in use on an operating industrial truck.

(2) The quantity of LP gas stored in buildings not frequented by the public, such as industrial buildings, shall not exceed 100 pounds, in addition to the cylinders affixed to the industrial trucks operating therein, provided the storage area is well ventilated. However, the local authority having jurisdiction may exclude storage in certain buildings or parts of buildings.

(b) Storage outdoors. Cylinders stored outdoors shall not be closer than ten feet to any building or group of buildings. Where the construction of a building or group of buildings will result in violation of the ten-foot distance requirement, the affected storage cylinders shall be re-located immediately in conformity with such distance requirement. Cylinders in storage shall be protected against tampering by unauthorized persons. Cylinder storage areas shall be enclosed by a substantial heavy weight woven or welded wire fence of not less than 14½ American wire gauge at least five feet high, topped by three strands of barbed wire spaced four inches apart. All uprights and braces shall be of non combustible material. This enclosure shall be provided with a locked entrance. Completely self-contained, securely housed, and well ventilated cylinder storage racks which have been approved for use by the Railroad Commission of Texas, and are locked when not in operation, may be excepted from such fencing requirements. However, cylinders may be located against a non combustible building with the following provisions:

(1) That they be stored in a protected ventilated area, so as to be inaccessible to unauthorized persons.

(2) Such protected ventilated areas shall be so located as to comply with regulations of the Railroad Commission in conjunction with the local authority having jurisdiction.



(c) General rules governing cylinders in storage.

(1) The outlet valves of cylinders in storage shall be closed.

(2) Empty containers which have been in LP Gas Service, when stored inside, shall be considered as full containers for the purpose of determining the maximum quantity of LP Gas permitted by this division.

#### **§9.304. GARAGING AND USE OF INDUSTRIAL TRUCKS INSIDE BUILDINGS. [11.4]**

(a) LP Gas fueled industrial trucks of either liquid or vapor fuel withdrawal systems are permitted to be used in buildings and structures.

(b) The filling of a fork lift motor fuel tank either DOT (ICC) or ASME, inside a building is not permitted.

(c) Exchange of removable fuel containers preferably should be done outdoors, but may be done indoors. When removable fuel containers are used, means shall be provided in the fuel system to minimize the escape of fuel when the containers are exchanged. This may be accomplished by either of the following methods:

(1) Using an approved automatic quick-closing coupling (*a type closing in both directions when uncoupled in the fuel line*), or

(2) Closing the valve in the fuel container and allowing the engine to run until the fuel in the line is consumed.

(d) Not more than two (2) ICC or DOT LP Gas containers shall be used on an industrial truck for motor fuel purposes. The total capacity of each ICC or DOT container on each industrial truck shall not exceed 50 lbs. of LP Gas.

(e) If the capacity of an ASME container exceeds 10.5 w.g. capacity, the ASME container shall be permanently mounted and shall be fueled outdoors.

#### **§9.305. CHARGING OF CONTAINERS. [11.5]**

(a) Removable ASME, ICC or DOT containers, fabricated specifically as fuel containers for industrial trucks, shall be filled by either weight or fixed liquid level gauge.

(b) Permanently mounted ASME motor fuel tanks shall be filled by a fixed liquid level gauge.

#### **§9.306. CONVERTING INDUSTRIAL TRUCKS. [11.6]**

(a) Industrial trucks originally designed for the use of gasoline for fuel may be converted to liquefied petroleum gas.

(b) All conversion of industrial trucks, installed by licensed LP Gas dealers, shall be done only by duly qualified personnel having passed the test for carburetion installation of the LP Gas Division, Railroad Commission of Texas.

(c) All component parts of the LP Gas carburetion system used in such conversions shall be approved by the Railroad Commission.

(d) Upon completion of the LP Gas conversion, the licensee making the installation shall attach in a visible and accessible place on the converted unit, a metal tag bearing the firm name of the licensee making the conversion, his current license number and year installed.

#### **§9.307. REQUIREMENTS FOR CONSTRUCTION, ORIGINAL TEST AND WORKING PRESSURE OF ICC OR DOT CONTAINERS. [11.7]**

(a) All ICC or DOT containers for use with LP Gas shall be manufactured, tested and inspected in accordance with applicable Department of Transportation regulations and specifications having a minimum working pressure of 240 psi.

(b) Containers shall be specifically designed for this use with fitting guards attached permanently to the containers.

(c) Containers shall be designed with special mounting brackets which positively orient the container in the proper position on the vehicle, whereby the relief valve will be in the vapor space of the container.

(d) Relief valves shall be so located that they communicate directly with the vapor space when the container is in operating position and also when the container is in storing or handling position.

(e) Containers shall be located on the truck in a place and in a manner to minimize the possibility of mechanical injury.

(f) Discharge from relief valves shall be directed upward within 45° of vertical and away from truck operator.

(g) All outlets except safety relief, filling and vapor return connections and liquid level gauging devices shall be equipped with suitable excess flow valves.

**§9.308. REQUIREMENTS FOR CONSTRUCTION, TEST AND WORKING PRESSURE OF ASME CONTAINERS. [11.8]**

(a) ASME containers for use with LP Gas shall be constructed in accordance with Division I, Section VIII of the edition of the ASME Boiler and Pressure Vessel Code in effect at the time of construction.

(b) The minimum design working pressure of ASME containers used on industrial trucks shall not be less than 250 lbs. per square inch gauge.

(c) Containers shall be specifically designed for this use with fitting guards attached securely to the container.

(d) Containers shall be designed with special mounting brackets which positively orient the container in the proper position on the vehicle, whereby the relief valve will be in the vapor space of the container.

(e) Relief valves shall be so located that they communicate directly with the vapor space when the container is in operating position and also when the container is in storing or handling position.

(f) Containers shall be located on the truck in a place and in a manner to minimize the possibility of mechanical injury.

(g) Discharge from relief valves shall be directed upward within 45° of vertical and away from truck operator.

(h) All outlets except safety relief, filling and vapor return connections and liquid level gauging devices shall be equipped with suitable excess flow valves.

**§9.309. HOSE SPECIFICATIONS. [11.9]**

*(See Basic Rules, §9.54 (a) through (e).)*

### §9.321. APPENDIX A

MINIMUM REQUIRED RATE OF DISCHARGE IN CUBIC FEET PER MINUTE OF AIR AT 120% OF THE MINIMUM PERMITTED START TO DISCHARGE PRESSURE FOR SAFETY RELIEF VALVES TO BE USED ON CONTAINERS OTHER THAN THOSE CONSTRUCTED IN ACCORDANCE WITH INTERSTATE COMMERCE COMMISSION SPECIFICATIONS.

Surface area = Total outside area of container in square feet.

When the surface area is not stamped on the name plate or when the marking is not legible, the area can be calculated by using one of the following formulas:

- (1) Cylindrical container with hemispherical heads Area = Overall length × outside diameter × 3.1416.
- (2) Cylindrical container with semi-ellipsoidal heads Area = Overall length + .3 outside diameter × outside diameter × 3.1416.
- (3) Spherical container  
Area = Outside diameter squared × 3.1416.

Flow rate SCFM Air = Cubic Feet per minute of air required at standard conditions, 60°F. and atmospheric pressure (14.7 PSIA).

Surface Area Sq. Ft.	Flow Rate SCFM Air	Surface Area Sq. Ft.	Flow Rate SCFM Air	Surface Area Sq. Ft.	Flow Rate SCFM Air
20	626	170	3620	600	10170
25	751	175	3700	650	10860
30	872	180	3790	700	11550
35	990	185	3880	750	12220
40	1100	190	3960	800	12880
45	1220	195	4050	850	13540
50	1330	200	4130	900	14190
55	1430	210	4300	950	14830
60	1540	220	4470	1000	15470
65	1640	230	4630	1050	16100
70	1750	240	4800	1100	16720
75	1850	250	4960	1150	17350
80	1950	260	5130	1200	17960
85	2050	270	5290	1250	18570
90	2150	280	5450	1300	19180
95	2240	290	5610	1350	19780
100	2340	300	5760	1400	20380
105	2440	310	5920	1450	20980
110	2530	320	6080	1500	21570
115	2630	330	6230	1550	22160
120	2720	340	6390	1600	22740
125	2810	350	6540	1650	23320
130	2900	360	6690	1700	23900
135	2990	370	6840	1750	24470
140	3080	380	7000	1800	25050
145	3170	390	7150	1850	25620
150	3260	400	7300	1900	26180
155	3350	450	8040	1950	26750
160	3440	500	8760	2000	27310
165	3530	550			

(1) The rate of discharge may be interpolated for intermediate values of surface area. For containers with total outside surface area greater than 2000 sq. ft. the required flow rate can be calculated using the formula, Flow Rate CFM Air = 53.632 A<sup>0.82</sup>.

(A) = Total outside surface area of container in square feet.

**Air Conversion Factors**

(Factors by which discharge rates for LP Gas are to be multiplied in order to get corresponding discharge rates for air.)

Container Type					
100	125	150	175	200	250
1.162	1.142	1.113	1.078	1.010	1.010

**§9.322. APPENDIX B**

**MINIMUM REQUIRED RATE OF DISCHARGE OF RELIEF VALVES FOR LIQUEFIED PETROLEUM GAS VAPORIZERS**

(see Section 9.42 and DIVISION VI)

Minimum rate of discharge required for relief devices on Liquefied Petroleum Gas Vaporizers shall be determined by the following formula:

$$Q = M (2.5 SH + So)$$

Where:

Q = Minimum required rate of discharge in cubic feet per minute of L P Gas.

Sh = Inside heat exchange surface of vaporizer in square feet. This is total area exposed to steam, hot water or heating medium used.

So = Outside surface of vaporizer in square feet. This is total outside surface which could be exposed to flame in case of fire around vaporizer.

M = Constant, the value of which for different types of vaporizers is as follows:

Type	A.S.M.E. Code
200	24.35

Vaporizers for purposes of these calculations shall be classified as to type in the same manner as storage containers given in Section 9.99, 9.130, and 9.155. The above formula is based upon the maximum heat input which might occur simultaneously from the heating medium and from an outside source through the shell of the vaporizer.

**§9.323. APPENDIX C**

**METHOD FOR CALCULATING LENGTH OF FIXED TUBES**

1. Calculate the Maximum Volume, for which fixed length tube shall be set by the following formula:

$$\frac{\text{Total Capacity of Container (Gals.)} \times \text{Filling Density}}{\text{Specific Gravity of L.P. Gas} \times \text{Volume Correction Factor} \times 100} = \text{Maximum Volume for which fixed length tube shall be set.}$$

**NOTE:** Volume Correction Factor shall be based on the thermal coefficient of expansion of the liquefied petroleum gas from 40° F. for aboveground containers (or 50° F. for underground containers) to 60° F. (For example, Propane with specific gravity of 0.510 has a Volume Correction Factor of 1.031 [ from 40° F. to 60° F.]) The following table gives representative Volume Correction Factors:

### VOLUME CORRECTION FACTORS

Specific Gravity									
0.500	0.510	0.520	0.530	0.540	0.550	0.560	0.570	0.580	0.590
(Aboveground) From 40° F. to 60° F.									
1.034	1.031	1.028	1.026	1.025	1.023	1.021	1.020	1.019	1.018
(Underground) From 50° F. to 60° F.									
1.018	1.016	1.014	1.013	1.012	1.011	1.010	1.009	1.009	1.009

2. Calculate the length of the fixed tube so that when its lower end touches the surface of the liquid in the container, the contents of the container will be the Maximum Volume as determined by the formula above.

### §9.324. APPENDIX D

#### METHOD OF CALCULATING MAXIMUM LIQUID VOLUME WHICH CAN BE PLACED IN A CONTAINER AT ANY LIQUID TEMPERATURE

The quantity of LP gas which may be placed in a container is dependent upon the temperature of the liquid and the maximum permitted filling density in addition to the size of the container.

The filling density depends on: The size of the tank, whether it is installed aboveground or underground, and the specific gravity of the liquid LP Gas at 60° F. placed in the container. Filling density values are given in Section 9.47. The liquid temperature should be obtained by measuring the temperature of the liquid LP Gas in the container such as with a thermometer placed in the thermometer well which is installed in the tank.

Knowing the liquid temperature and the filling density, the maximum volume of liquid LP Gas which may be placed in the container can be determined as follows:

$$V = \frac{D}{G \times F}$$

Where:

V = maximum liquid volume (in percent of total container capacity) which shall be placed in a container when the liquid temperature is T.

D = filling density from 9.47(a) in per cent.

G = specific gravity of LP Gas at 60° F. placed in container.

F = correction factor from following table for correcting liquid volumes from 60° F. to volume at temperature T. The correction factor is obtained by finding the specific gravity at 60° F. (G) in the column at the top of the table and coming down this column till the actual liquid temperature T is found. The correction factor corresponding to this specific gravity and temperature is then read. Interpolation is permitted.

T = temperature of liquid LP Gas in container in Fahrenheit.

After obtaining V from the above formula the actual maximum gallons of LP Gas which may be placed in a container is obtained by multiplying the water capacity of the container by  $\frac{V}{100}$ .

#### LIQUID VOLUME CORRECTION FACTOR

SPECIFIC GRAVITIES AT 60°F./60°F.

Observed Temperature Degrees Fahrenheit	SPECIFIC GRAVITIES AT 60°F./60°F.											
	Propane							Iso-Butane		normal Butane		
0.500	0.5079	0.510	0.520	0.530	0.540	0.550	0.560	0.5631	0.570	0.580	0.5844	0.590

VOLUME CORRECTION FACTORS

-50	1.160	1.155	1.153	1.146	1.140	1.133	1.127	1.122	1.120	1.116	1.111	1.108	1.106
-45	1.153	1.148	1.146	1.140	1.134	1.128	1.122	1.117	1.115	1.111	1.106	1.103	1.101
-40	1.147	1.142	1.140	1.134	1.128	1.122	1.117	1.111	1.110	1.106	1.101	1.099	1.097
-35	1.140	1.135	1.134	1.128	1.122	1.116	1.112	1.106	1.105	1.101	1.096	1.094	1.092
-30	1.134	1.129	1.128	1.122	1.116	1.111	1.106	1.101	1.100	1.096	1.092	1.090	1.088
-25	1.127	1.122	1.121	1.115	1.110	1.105	1.100	1.095	1.094	1.091	1.087	1.085	1.083
-20	1.120	1.115	1.114	1.109	1.104	1.099	1.095	1.090	1.089	1.086	1.082	1.080	1.079
-15	1.112	1.109	1.107	1.102	1.097	1.093	1.089	1.084	1.083	1.080	1.077	1.075	1.074
-10	1.105	1.102	1.100	1.095	1.091	1.087	1.083	1.079	1.078	1.075	1.072	1.071	1.069
-5	1.098	1.094	1.094	1.089	1.085	1.081	1.077	1.074	1.073	1.070	1.067	1.066	1.065
0	1.092	1.088	1.088	1.084	1.080	1.076	1.073	1.069	1.068	1.066	1.063	1.062	1.061
2	1.089	1.086	1.085	1.081	1.077	1.074	1.070	1.067	1.066	1.064	1.061	1.060	1.059
4	1.086	1.083	1.082	1.079	1.075	1.071	1.068	1.065	1.064	1.062	1.059	1.058	1.057
6	1.084	1.080	1.080	1.076	1.072	1.069	1.065	1.062	1.061	1.059	1.057	1.055	1.054
8	1.081	1.078	1.077	1.074	1.070	1.066	1.063	1.060	1.059	1.057	1.055	1.053	1.052
10	1.078	1.075	1.074	1.071	1.067	1.064	1.061	1.058	1.057	1.055	1.053	1.051	1.050
12	1.075	1.072	1.071	1.068	1.064	1.061	1.059	1.056	1.055	1.053	1.051	1.049	1.048
14	1.072	1.070	1.069	1.066	1.062	1.059	1.056	1.053	1.053	1.051	1.049	1.047	1.046
16	1.070	1.067	1.066	1.063	1.060	1.056	1.054	1.051	1.050	1.048	1.046	1.045	1.044
18	1.067	1.065	1.064	1.061	1.057	1.054	1.051	1.049	1.048	1.046	1.044	1.043	1.042
20	1.064	1.062	1.061	1.058	1.054	1.051	1.049	1.046	1.046	1.044	1.042	1.041	1.040
22	1.061	1.059	1.058	1.055	1.052	1.049	1.046	1.044	1.044	1.042	1.040	1.039	1.038
24	1.058	1.056	1.055	1.052	1.049	1.046	1.044	1.042	1.042	1.040	1.038	1.037	1.036
26	1.055	1.053	1.052	1.049	1.047	1.044	1.042	1.039	1.039	1.037	1.036	1.036	1.034
28	1.052	1.050	1.049	1.047	1.044	1.041	1.039	1.037	1.037	1.035	1.034	1.034	1.032
30	1.049	1.044	1.046	1.044	1.041	1.039	1.037	1.035	1.035	1.033	1.032	1.032	1.030
32	1.046	1.044	1.043	1.041	1.038	1.036	1.035	1.033	1.033	1.031	1.030	1.030	1.028
34	1.043	1.041	1.040	1.038	1.036	1.034	1.032	1.031	1.030	1.029	1.028	1.028	1.026
36	1.039	1.038	1.037	1.035	1.033	1.031	1.030	1.028	1.028	1.027	1.025	1.025	1.024
38	1.036	1.035	1.034	1.032	1.031	1.029	1.027	1.026	1.025	1.025	1.023	1.023	1.022
40	1.033	1.032	1.031	1.029	1.028	1.026	1.025	1.024	1.023	1.023	1.021	1.021	1.020
42	1.030	1.029	1.028	1.027	1.025	1.024	1.023	1.022	1.021	1.021	1.019	1.019	1.018
44	1.027	1.026	1.025	1.023	1.022	1.021	1.020	1.019	1.019	1.018	1.017	1.017	1.016
46	1.023	1.022	1.022	1.021	1.020	1.018	1.018	1.017	1.016	1.016	1.015	1.015	1.014
48	1.020	1.019	1.019	1.018	1.017	1.016	1.105	1.014	1.104	1.013	1.013	1.013	1.012
50	1.017	1.016	1.016	1.015	1.014	1.013	1.013	1.012	1.012	1.011	1.011	1.011	1.010
52	1.014	1.013	1.012	1.012	1.011	1.010	1.010	1.009	1.009	1.009	1.009	1.009	1.008
54	1.010	1.010	1.009	1.009	1.008	1.008	1.007	1.007	1.007	1.007	1.006	1.006	1.006
56	1.007	1.007	1.006	1.006	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.004	1.004
58	1.003	1.003	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002
60	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
62	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998
64	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996
66	0.990	0.990	0.990	0.990	0.991	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.993
68	0.986	0.986	0.987	0.987	0.988	0.989	0.990	0.990	0.990	0.990	0.991	0.991	0.991
70	0.983	0.983	0.984	0.984	0.985	0.986	0.987	0.988	0.988	0.988	0.989	0.989	0.989
72	0.979	0.980	0.981	0.981	0.982	0.983	0.984	0.985	0.986	0.986	0.987	0.987	0.987
74	0.976	0.976	0.977	0.978	0.980	0.980	0.982	0.983	0.983	0.984	0.985	0.985	0.985
76	0.972	0.973	0.974	0.975	0.977	0.978	0.979	0.980	0.981	0.981	0.982	0.982	0.983
78	0.969	0.970	0.970	0.972	0.974	0.975	0.977	0.978	0.978	0.979	0.980	0.980	0.981
80	0.965	0.967	0.967	0.969	0.971	0.972	0.974	0.975	0.976	0.977	0.978	0.978	0.979
82	0.961	0.963	0.963	0.966	0.968	0.969	0.971	0.972	0.973	0.974	0.976	0.976	0.977
84	0.957	0.959	0.960	0.962	0.965	0.966	0.968	0.970	0.971	0.972	0.974	0.974	0.975
86	0.954	0.956	0.956	0.959	0.961	0.964	0.966	0.967	0.968	0.969	0.971	0.971	0.972
88	0.950	0.952	0.953	0.955	0.958	0.961	0.963	0.965	0.966	0.967	0.969	0.969	0.970
90	0.946	0.949	0.949	0.952	0.955	0.958	0.960	0.962	0.963	0.964	0.967	0.967	0.968
92	0.942	0.945	0.946	0.949	0.952	0.955	0.957	0.959	0.960	0.962	0.964	0.965	0.966
94	0.938	0.941	0.942	0.946	0.949	0.952	0.954	0.957	0.958	0.959	0.962	0.962	0.964
96	0.935	0.938	0.939	0.942	0.946	0.949	0.952	0.954	0.955	0.957	0.959	0.960	0.961
98	0.931	0.934	0.935	0.939	0.943	0.946	0.949	0.952	0.953	0.954	0.957	0.957	0.959
100	0.927	0.930	0.932	0.936	0.940	0.943	0.946	0.949	0.950	0.952	0.954	0.955	0.957
105	0.917	0.920	0.923	0.927	0.931	0.935	0.939	0.943	0.943	0.946	0.949	0.949	0.951

110	0.907	0.911	0.913	0.918	0.923	0.927	0.932	0.936	0.937	0.939	0.943	0.944	0.946
115	0.897	0.902	0.904	0.909	0.915	0.920	0.925	0.930	0.930	0.933	0.937	0.938	0.940
120	0.887	0.892	0.894	0.900	0.907	0.912	0.918	0.923	0.924	0.927	0.931	0.932	0.934
125	0.876	0.881	0.884	0.890	0.898	0.903	0.909	0.916	0.916	0.920	0.925	0.927	0.928
130	0.865	0.871	0.873	0.880	0.888	0.895	0.901	0.908	0.909	0.913	0.918	0.921	0.923
135	0.854	0.861	0.863	0.871	0.879	0.887	0.894	0.901	0.902	0.907	0.912	0.914	0.916
140	0.842	0.850	0.852	0.861	0.870	0.879	0.886	0.893	0.895	0.900	0.905	0.907	0.910

**§9.325. APPENDIX E**

**ALTERNATE PERMITTED MAXIMUM LIQUID VOLUMES IN PER CENT OF TOTAL CONTAINER CAPACITY, FOR FILLING CONTAINERS UP TO 1200 GALLONS TOTAL WATER CAPACITY AS SPECIFIED IN 9.47 (a).**

**MAXIMUM LIQUID VOLUME PER CENT**

<b>L.P. Gas</b>	<b>Aboveground Containers Liq. Temp. Assumed to be 40° F.</b>	<b>Underground Containers Liq. Temp. Assumed to be 50° F.</b>
Propane (Approx. sp. gr. 0.51)	80	89
Mixtures (Approx. sp. gr. 0.55)	83	91
Butane (Approx. sp. gr. 0.58)	86	93

**§9.326. APPENDIX F**

**METHOD OF CALCULATING MAXIMUM VOLUME OF L.P. GAS WHICH CAN BE PLACED IN A CONTAINER FOR WHICH LENGTH OF FIXED DIP TUBE IS SET.**

1. It is impossible to set out in a table the length of a fixed tube for various capacity tanks because of the varying tank diameters and lengths and because the tank may be installed either in a vertical or horizontal position. Knowing the maximum permitted filling volume in gallons, however, the length of the fixed tube can be determined by the use of a strapping table obtained from the container manufacturer. The length of the fixed tube should be such that when its lower end touches the surface of the liquid in the container, the contents of the container will be the maximum permitted volume as determined by the following formula:

2. Formula for determining maximum volume of Liquefied Petroleum Gas for which a fixed length of dip tube shall be set.

$$\begin{array}{rcl}
 \text{Water Cap. (Gals.) of Container (a)} & & \text{Maximum} \\
 \times \text{ Filling Density (b)} & & \text{Volume} \\
 \text{Sp. Gr. of LP Gas (a) } \times \text{ Volume} & = & \text{of} \\
 \text{Correction Factor } \times 100 & & \text{L.P. Gas}
 \end{array}$$

**NOTE:** (a) Measured at 60° F.

(b) From Section 9.47 "Filling Densities".

(c) For aboveground containers the liquid temperature is assumed to be 40° F. and for underground containers the liquid temperature is assumed to be 50° F. To correct the liquid volumes at these temperatures to 60° F. the following factors shall be used:

VOLUME CORRECTION FACTORS		
Specific Gravity	Aboveground	Underground
0.500	1.033	1.017
.510	1.031	1.016
.520	1.029	1.015
.530	1.028	1.014
.540	1.026	1.013
.550	1.025	1.013
.560	1.024	1.012
.570	1.023	1.011
.580	1.021	1.011
.590	1.020	1.010

Example: Assume a 100 gallon total water capacity tank for aboveground storage of propane having a specific gravity of 0.510 at 60° F.

$$\begin{aligned}
 & 100 \text{ (Gals)} \times 42 \\
 & \text{(Filling Density from 9.47)} \qquad \qquad \qquad = \qquad \qquad 4200 \\
 & 0.510 \times 1.031 \text{ (Correction Factor)} \qquad \qquad \qquad = \qquad \qquad 52.6 \\
 & \text{from Table in (1) above)} \times 100 \\
 \hline
 & \frac{4200}{52.6} = 79.8 \text{ gallons propane, the maximum amount permitted to be placed in a 100 gallon total} \\
 & \text{water capacity aboveground container equipped with a fixed dip tube.}
 \end{aligned}$$

3. The maximum volume of Liquefied Petroleum Gas which can be placed in a container when determining the length of the dip tube expressed as a percentage of total water content of the container is calculated by the following formula:

$$\frac{\text{Maximum Vol. of LP Gas (From Formula in (1) above} \times 100}{\text{Total water content of container in gallons}} = \frac{\text{Maximum Per Cent of L.P. Gas}}{\text{of L.P. Gas}}$$

4. The maximum weight of Liquefied Petroleum gas which may be placed in a container for determining the length of a fixed tube is determined by multiplying the maximum volume of liquefied petroleum gas obtained by the formula in (1) above by the pounds of liquefied petroleum gas in a gallon at 40° F. for aboveground and at 50° F. for underground containers. For example, typical pounds per gallon are specified below.

	Aboveground pounds per gallon	Underground pounds per gallon
Propane	4.37	4.31
N. Butane	4.97	4.92



§9.327. APPENDIX G

FLOW OF LP GAS THROUGH FIXED ORIFICES

LP - Gases  
(Btu per hour at sea level)

	<b>PROPANE</b>	<b>BUTANE</b>
Btu per Cubic Foot = .....	2,500	3,175
Specific Gravity = .....	1.53	2.00
Pressure at Orifice, Inches Water Column = .....	11	11
Orifice Coefficient = .....	0.9	0.9

For altitudes above 2,000 feet, first select the equivalent orifice size at sea level from Table 4.

Orifice or Drill Size	Butane or Butane-Propane Mixtures		Orifice or Drill Size	Butane or Butane-Propane Mixtures	
	Propane	Butane or Butane-Propane Mixtures		Propane	Butane or Butane-Propane Mixtures
.008	500	554	51	35,300	39,400
.009	641	709	50	38,500	42,800
.010	791	875	49	41,850	45,350
.011	951	1,053	48	45,450	50,300
.012	1,130	1,250	47	48,400	53,500
80	1,430	1,590	46	51,500	57,000
79	1,655	1,830	45	52,900	58,500
78	2,015	2,230	44	58,050	64,350
77	2,545	2,815	43	62,200	69,000
76	3,140	3,480	42	68,700	76,200
75	3,465	3,840	41	72,450	80,200
74	3,985	4,410	40	75,400	83,500
73	4,525	5,010	39	77,850	86,200
72	4,920	5,450	38	81,000	89,550
71	5,320	5,900	37	85,000	94,000
70	6,180	6,830	36	89,200	98,800
69	6,710	7,430	35	95,000	105,300
68	7,560	8,370	34	97,000	107,200
67	8,040	8,910	33	101,000	111,900
66	8,550	9,470	32	105,800	117,000
65	9,630	10,670	31	113,200	125,400
64	10,200	11,300	30	129,700	143,600
63	10,800	11,900	29	145,700	163,400
62	11,360	12,530	28	154,700	171,600
61	11,930	13,280	27	163,100	180,000
60	12,570	13,840	26	169,900	187,900
59	13,220	14,630	25	175,500	194,600
58	13,840	15,300	24	181,700	201,600
57	14,550	16,090	23	186,800	206,400
56	16,990	18,790	22	193,500	214,500
55	21,200	23,510	21	198,600	220,200
54	23,850	26,300	20	203,700	225,000
53	27,790	30,830	19	217,100	241,900
52	31,730	35,100	18	225,600	249,800

**EQUIVALENT ORIFICE SIZES AT HIGH ALTITUDES**  
(Includes 4% input reduction for each 1,000 feet)

Orifice Size at Sea Level	Orifice Size Required at Other Elevations										Orifice Size at Sea Level	Orifice Size Required at Other Elevations									
	2000	3000	4000	5000	6000	7000	8000	9000	10000	2000		3000	4000	5000	6000	7000	8000	9000	10000		
1	2	2	3	3	4	5	7	8	10	41	42	42	42	43	43	44	44	45	46		
2	3	3	4	5	6	7	9	10	12	42	42	43	43	43	44	44	45	46	47		
3	4	5	7	8	9	10	12	13	15	43	44	44	44	45	45	46	47	47	48		
4	6	7	8	9	10	12	13	14	16	44	45	45	45	46	47	47	48	48	49		
5	7	8	9	10	12	13	14	15	17	45	46	47	47	47	48	48	49	49	50		
6	8	9	10	11	12	13	14	16	17	46	47	47	47	48	48	49	49	50	50		
7	9	10	11	12	13	14	15	16	18	47	48	48	49	49	49	50	50	51	51		
8	10	11	12	13	13	15	16	17	18	48	49	49	49	50	50	50	51	51	52		
9	11	12	12	13	14	16	17	18	19	49	50	50	50	51	51	51	52	52	52		
10	12	13	13	14	15	16	17	18	19	50	51	51	51	51	52	52	52	53	53		
11	13	13	14	15	16	17	18	19	20	51	51	52	52	52	52	53	53	53	54		
12	13	14	15	16	17	17	18	19	20	52	52	53	53	53	53	54	54	54	54		
13	15	15	16	17	18	18	19	20	22	53	54	54	54	54	54	55	55	55	55		
14	16	16	17	18	18	19	20	21	23	54	54	55	55	55	55	56	56	56	56		
15	16	17	17	18	19	20	20	22	24	55	55	55	55	56	56	56	56	56	57		
16	17	18	18	19	19	20	22	23	26	56	56	56	57	57	57	58	59	59	60		
17	18	19	19	20	21	22	23	24	26	57	58	59	59	60	60	61	62	63	63		
18	19	19	20	21	22	23	24	26	27	58	59	60	60	61	62	62	63	63	64		
19	20	20	21	22	23	25	26	27	28	59	60	61	61	62	62	63	64	64	65		
20	22	22	23	24	25	26	27	28	29	60	61	61	62	63	63	64	64	65	65		
21	23	23	24	25	26	27	28	28	29	61	62	62	63	63	64	65	65	66	66		
22	23	24	25	26	27	27	28	29	29	62	63	63	64	64	65	65	66	66	67		
23	25	25	26	27	27	28	29	29	30	63	64	64	65	65	65	66	66	67	68		
24	25	26	27	27	28	28	29	29	30	64	65	65	65	65	66	66	66	67	68		
25	26	27	27	28	28	29	29	30	30	65	65	66	66	66	67	67	68	68	69		
26	27	28	28	28	29	29	30	30	30	66	67	67	68	68	68	69	69	69	70		
27	28	28	28	29	29	29	30	30	31	67	68	68	68	69	69	69	70	70	70		
28	29	29	29	30	30	30	30	31	31	68	68	69	69	69	70	70	70	71	71		
29	29	30	30	30	30	31	31	31	32	69	70	70	70	70	71	71	71	72	72		
30	30	31	31	31	31	32	32	33	35	70	70	71	71	71	71	72	72	73	73		
31	32	32	32	33	34	35	36	37	38	71	72	72	72	73	73	73	74	74	74		
32	33	34	35	35	36	36	37	38	40	72	73	73	73	73	74	74	74	74	75		
33	35	35	36	36	37	38	38	40	41	73	73	74	74	74	74	75	75	75	76		
34	35	36	36	37	37	38	39	40	42	74	74	75	75	75	75	76	76	76	76		
35	36	36	37	37	38	39	40	41	42	75	75	76	76	76	76	77	77	77	77		
36	37	38	38	39	40	41	41	42	43	76	76	76	77	77	77	77	77	77	77		
37	38	39	39	40	41	42	42	43	43	77	77	77	77	78	78	78	78	78	78		
38	39	40	41	41	42	42	43	43	44	78	78	78	78	79	79	79	79	80	80		
39	40	41	41	42	42	43	43	44	44	79	79	80	80	80	80	.013	.012	.012	.012		
40	41	42	42	42	43	43	44	44	45	80	80	.013	.013	.013	.012	.012	.012	.012	.011		

**LAWS OF THE STATE OF TEXAS  
PERTAINING TO THE  
LIQUEFIED PETROLEUM GAS  
OPERATIONS IN TEXAS**





## NATURAL RESOURCES CODE

### CHAPTER 113. LIQUEFIED PETROLEUM GAS INDUSTRY

(As Amended by H. B. 2008)

#### SUBCHAPTER A. GENERAL PROVISIONS

##### Section

- 113.001. Title.
- 113.002. Definitions.
- 113.003. Exceptions.

(Sections 113.004-113.010 reserved for expansion)

#### SUBCHAPTER B. ADMINISTRATIVE PROVISIONS

- 113.011. Liquefied Petroleum Gas Division.
- 113.012. General Duties.
- 113.013. Director of LPG Division.
- 113.014. Employees.
- 113.015. Funds for Financing LPG Division.
- 113.0511. Limitations on Rulemaking Authority.

(Sections 113.016-113.050 reserved for expansion)

#### SUBCHAPTER C. RULES AND STANDARDS

- 113.051. Adoption of Rules and Standards.
- 113.052. Adoption of National Codes.
- 113.053. Effect on Certain Containers.

(Sections 113.054-113.080 reserved for expansion)

#### SUBCHAPTER D. LICENSING

- 113.081. License Requirement.
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- 113.083. (Reserved for Expansion).
- 113.084. Application.
- 113.085. (Reserved for Expansion).
- 113.086. (Reserved for Expansion).
- 113.087. Examination and Seminar Requirements.
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- 113.089. Special Requirements for Licensing.
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- 113.091. License Denial.
- 113.092. License Issuance.
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- 113.095. License by Endorsement.
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- 113.097. Insurance Requirement.
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- 113.099. Statements in Lieu of Insurance Certificates.
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- 113.101. (Reserved for expansion).
- 113.102. Prior Licenses.

(Sections 113.103-113.130 reserved for expansion)

## **SUBCHAPTER E. MOTOR VEHICLES AND TESTING LABORATORIES**

- 113.131. Transport Trucks and Trailers.
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- 113.133. Motor Carrier Laws.
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- 113.161. Violations of Chapter or Rules; Informal Actions.
- 113.162. Hearings.
- 113.163. Findings and Judgment.
- 113.164. Appeal.

*(Sections 113.165-113.200 reserved for expansion)*

## **SUBCHAPTER G. FEES AND FUNDS**

- 113.201. Deposit and Expenditure of Fees and Funds.

*(Sections 113.202-113.230 reserved for expansion)*

## **SUBCHAPTER H. ENFORCEMENT**

- 113.231. Injunctions.
- 113.232. General Penalty.
- 113.233. Supplying or Removing LPG After Warning Tag Attached.
- 113.234. Penalty for Unauthorized Removal of Tag.

## **TEX. REV. CIV. STAT. ART. 6053. REGULATION OF UTILITIES.**

#### H. B. NO. 4

Act repealing Subsections 3 through 19 of Section 1 of Senate Bill No. 269, Acts, 1945, Forty-ninth Legislature, page 629, Chapter 358, as amended by Senate Bill No. 256, Acts, 1949, Fifty-first Legislature, page 411, Chapter 220, as further amended by Senate Bill No. 143, Acts, 1951, Fifty-second Legislature, page 612, Chapter 363, also known as Article 6053 and 6052a of the Revised Civil Statutes of Texas; with savings clause as to pending proceedings or actions; establishing a comprehensive code regulating the liquefied petroleum gas industry; authorizing and directing the Railroad Commission of Texas to promulgate adequate rules, regulations and/or standards pertaining to said industry for the health, welfare and safety of the general public and authorizing it to adopt all or part of the codes of nationally recognized associations or societies in connection therewith; providing for the establishment of a Liquefied Petroleum Gas Division as a separate and distinct Division of the Railroad Commission of Texas for the administration and enforcement of this Act; directing the Railroad Commission of Texas to appoint a full time Director of such Division and providing for sufficient employees; requiring certain safeguards for motor vehicles with LPG facilities; requiring and assessing fees for licenses, permits and cards for persons, activities and objects covered by this Act; establishing categories of and assessing fees for LPG dealers; providing for publication of notice and quarterly public hearings on applications for licenses as an LPG dealer; prohibiting LPG dealers from hiring service, and/or installation men or delivery or transport truck drivers unless such person shall have passed an examination of his competency therefor with a temporary exemption for trainee employees for a forty-five day (45) day period, establishing a fee for such examinations; requiring the registration of delivery and transport trucks or other motor vehicles and establishing an annual fee therefor; providing for the proration of fees over a certain amount; providing for the disposition of funds for the administration and enforcement of this Act; authorizing the Commission to suspend or revoke any license, permit or registration for violation of or failure to comply with this Act; providing for notice by registered or certified mail to parties charged with a written complaint and requiring a public hearing thereon within ten (10) days and empowering the Director to conduct investigations, summon witnesses, to require production of books, documents and records, providing for the taking of depositions and the use of interrogatories and admissions; granting such party the right to be heard at such hearing; requiring written findings and judgment by the Commission after such hearing and requiring permanent public records to be kept thereof; authorizing the Commission to suspend for ninety (90) days or revoke the license, registration and/or permit of a party found guilty of such complaint; providing for an action for reinstatement thereof in a proper district court by way of a trial de novo and the stay of enforcement of such a judgment if timely appealed until final disposition thereof by such district court; prescribing the same procedure for the appeal of an order denying a license, registration, and/or permit; authorizing the Director to enjoin violations or failures to comply with this Act; requiring a surety bond and public liability, property damage and workmen's compensation and/or employer's liability insurance coverage for LPG dealers; prescribing penalties for the violation of this Act; providing for entry at reasonable times by authorized persons onto public or private premises of licensees under this Act and authorizing such person to declare same unsafe if not in compliance with this Act and to attach a warning tag to this effect thereon; constituting it a misdemeanor to remove such tags or to knowingly sell, furnish, deliver or supply LPG to any such container, tank, apparatus, system or equipment so tagged; defining certain terms; providing for the severability of any Section of this Act found to be void or unconstitutional; repealing all or part of laws in conflict with this Act; and declaring an emergency.

*Vernon's Ann. Civ. St. Art. 6066d*

The first part of the document discusses the importance of maintaining accurate records and the role of the auditor in ensuring the integrity of the financial statements. It highlights the need for transparency and accountability in the reporting process.

The second part of the document focuses on the specific procedures and standards that must be followed during the audit process. This includes the selection of samples, the use of professional judgment, and the documentation of findings.

The third part of the document addresses the communication of audit results to the relevant stakeholders. It emphasizes the importance of clear and concise reporting, as well as the need to provide a thorough explanation of the audit findings and any identified risks.

The final part of the document discusses the ongoing nature of the audit process and the need for continuous improvement. It highlights the importance of staying up-to-date on the latest industry trends and regulatory requirements, as well as the need for ongoing communication and collaboration with the auditee.

Signature of the Auditor \_\_\_\_\_



**SECTION 1.** Chapter 113, Natural Resources Code, is amended to read as follows:

## **CHAPTER 113. LIQUEFIED PETROLEUM GAS**

### **SUBCHAPTER A. GENERAL PROVISIONS**

#### **Section 113.001. Title**

This chapter may be cited as the Liquefied Petroleum Gas Code or LPG Code.

#### **Section 113.002. Definitions.**

In this chapter:

- (1) "Commission" means the Railroad Commission of Texas.
- (2) "Division" means the liquefied petroleum gas division of the commission.
- (3) "Employee" means any individual who renders or performs any services or labor for another person for compensation and includes individuals hired on a part-time or temporary basis or on a full-time or permanent basis including an owner-employee.
- (4) "Liquefied petroleum gas," "LPG," or "LP-gas" means any material that is composed predominantly of any of the following hydrocarbons or mixtures of hydrocarbons: propane, propylene, normal butane, isobutane, and butylenes.
- (5) "Container" means any receptacle designed for the transportation or storage of LPG or any receptacle designed for the purpose of receiving injections of LPG for use or consumption by or through an LPG system.
- (6) "Appliance" means any apparatus or fixture that uses or consumes LPG furnished or supplied by an LPG system to which it is connected or attached.
- (7) "LPG system" means all piping, fittings, valves, and equipment, excluding containers and appliances, that connect one or more containers to one or more appliances that use or consume LPG.
- (8) "Transport system" means any and all piping, fittings, valves, and equipment on a transport, excluding the container.
- (9) "Transfer system" means all piping, fittings, valves, and equipment utilized in dispensing LPG between containers.
- (10) "Transport" means any bobtail or semitrailer equipped with one or more containers.
- (11) "Subframing" means the attachment of supporting structural members to the pads of a container but does not include welding directly to or on the container.
- (12) "Representative" means the individual designated to the commission by a license applicant or licensee as the principal person in authority and responsibility actively supervising the conduct of the licensee's LPG activities.

#### **Section 113.003. Exceptions.**

None of the provisions of this chapter apply to:

- (1) the production, refining, or manufacture of LPG;
- (2) the storage, sale, or transportation of LPG by pipeline or railroad tank car by a pipeline company, producer, refiner, or manufacturer;
- (3) equipment used by a pipeline company, producer, refiner, or manufacturer in a producing, refining, or manufacturing process or in the storage, sale, or transportation by a pipeline or railroad tank car;

- (4) any deliveries of LPG to another person at the place of production, refining, or manufacturing; or
- (5) underground storage facilities other than LP-gas containers designed for underground use.

*(Sections 113.004-113.010 reserved for expansion)*

## **SUBCHAPTER B. ADMINISTRATIVE PROVISIONS**

### **Section 113.011. Liquefied Petroleum Gas Division.**

There is created and organized a separate and distinct division of the commission known as the liquefied petroleum gas division or the LPG division.

### **Section 113.012. General Duties.**

The LPG Division shall administer and enforce the laws of this state and the rules and standards of the commission relating to liquefied petroleum gas.

### **Section 113.013. Director of LPG Division.**

The commission shall appoint and employ a director of the LPG division, who shall serve at the pleasure of the commission and who shall devote full time and attention to administering the provisions of this chapter.

### **Section 113.014. Employees.**

Sufficient employees shall be provided to the LPG division for the enforcement of this chapter.

### **Section 113.015. Funds for Financing LPG Division**

The commission shall look only to the revenue derived from the operation of this chapter and appropriated by the legislature for expenses of conducting the liquefied petroleum gas division and administering this chapter.

*[Sections 113.016-113.050 reserved for expansion]*

## **SUBCHAPTER C. RULES AND STANDARDS**

### **Section 113.051 Adoption of Rules and Standards**

Except as provided in Section 113.003 of this code, the commission shall promulgate and adopt rules or standards or both relating to any and all aspects or phases of the LPG industry that will protect or tend to protect the health, welfare, and safety of the general public.

### **Section 113.0511. Limitations on Rulemaking Authority EFFECTIVE 9/1/83**

(a) The commission may not adopt rules restricting competitive bidding or advertising by a person regulated by the commission except to prohibit false, misleading, or deceptive practices by the person.

(b) The commission may not include in any rules to prohibit false, misleading, or deceptive practices by a person regulated by the commission a rule that:

- (1) restricts the person's use of any medium for advertising;
- (2) restricts the person's personal appearance or use of his voice in an advertisement;
- (3) relates to the size or duration of an advertisement by the person; or
- (4) restricts the person's advertisement under a trade name.

### **Section 113.052 Adoption of National Codes**

The commission may adopt by reference, in whole or in part, the published codes of the National Board of Fire Underwriters, the National Fire Protection Association, the American Society for Mechanical Engineers, and other nationally recognized societies or any one or more of these codes as standards to be met in the design, construction, fabrication, assembly, installation, use, and maintenance of containers, tanks, appliances, systems, and equipment for the transportation, storage, delivery, use, and consumption of LPG or any one or more of these purposes.

### **Section 113.053. Effect on Certain Containers**

Rules, standards, and codes adopted pursuant to Sections 113.051 through 113.052 of this code do not apply to containers used in accordance with and subject to the regulations of the Department of Transportation or to containers that are owned or used by the United States government.

*[Sections 113.054-113.080 reserved for expansion]*

## **SUBCHAPTER D. LICENSING**

### **Section 113.081. License Requirement REVISED 8/29/83**

(a) Unless otherwise stated in this chapter, no person may engage in any of the following activities unless that person has obtained a license from the commission authorizing that activity:

(1) container activities: the manufacture, assembly, repair, sale, installation, or subframing of containers for use in this state, except that no license is required for the sale of a new container of 96 pounds water capacity or less;

(2) systems activities: the installation, service, and repair of systems for use in this state, including the laying or connecting of pipes and fittings connecting with or to systems or serving a system or appliances to be used with liquefied petroleum gas as a fuel;

(3) appliance activities: the service, installation, and repair of appliances used or to be used in this state in connection with systems using liquefied petroleum gas as a fuel, except that no license shall be required for installation or connection of unvented type appliances to LPG systems by means of LPG appliance connectors; or

(4) product activities; the sale, transportation, dispensation, or storage of liquefied petroleum gas in this state, except that no license shall be required to sell LPG where the vendor never obtains possessory rights to the product sold or where the product is transported or stored by the ultimate consumer for personal consumption only.

(b) The provisions of Subsection (a) of this section do not apply to LPG handled in a container of less than one gallon water capacity that is an integral part of a device for its use, nor to original and replacement containers for the device, nor to a person who is not engaged in business as provided in Section 113.082 of this code.

### **Section 113.082. Categories of Licensee; Fees REVISED 9/1/83**

A prospective licensee in LPG may apply to the LPG division for a license to engage in any one or more of the following categories:

(A) manufacturers/fabricators: the manufacture, fabrication, assembly, repair, installation, subframing, and sale of LPG containers, including LPG motor fuel containers and systems, and the repair and installation of transportation and transfer systems; the category "A" application and original license fee is an amount not to exceed \$1,000 as determined by the commission; the annual renewal license fee is an amount not to exceed \$600 as determined by the commission;

(B) transport outfitters: the subframing and sale of LPG transport containers, the installation and sale of LPG motor fuel containers, and the installation and repair of transport and motor fuel systems; the category "B" application and original license fee is an amount not to exceed

\$200 as determined by the commission; the annual renewal license fee is an amount not to exceed \$100 as determined by the commission;

(C) carriers: the transportation of LPG by transport, including the loading and unloading of LPG, and the installation and repair of transport systems; the category "C" application and original license fee is an amount not to exceed \$1,000 as determined by the commission; the annual renewal license fee is an amount not to exceed \$300 as determined by the commission;

(D) general installers and repairmen: the sale, service, and installation of containers, excluding motor fuel containers, and the service, installation, and repair of piping, certain appliances as defined by rule, and LPG systems, excluding motor fuel systems; except that the commission may, by rule, exempt journeymen and/or master plumbers duly licensed by the Texas State Board of Plumbing Examiners from this licensing requirement; the category "D" application and original license fee is an amount not to exceed \$100 as determined by the commission; the annual renewal license fee is an amount not to exceed \$70 as determined by the commission;

(E) retail and wholesale dealers: the storage, sale, transportation, and distribution of LPG at retail and wholesale, and all other activities included in this section except the manufacture, fabrication, assembly, repair, and subframing of LPG containers; the category "E" application and original license fee is an amount not to exceed \$750 as determined by the commission; the annual renewal license fee is an amount not to exceed \$300 as determined by the commission;

(F) bottle exchanges: the operation of a bottle-filling and container exchange dealership, including bottle filling and the sale of bottled LPG; the category "F" application and original license fee is an amount not to exceed \$100 as determined by the commission; the annual renewal license fee is an amount not to exceed \$50 as determined by the commission;

(G) service station: the operation of an LPG service station filling ASME containers designed for motor and mobile fuel; the category "G" application and original license fee is an amount not to exceed \$100 as determined by the commission; the annual renewal license fee is an amount not to exceed \$50 as determined by the commission;

(H) bottle dealers: the transportation and sale of bottled LPG; the category "H" application and original license fee is an amount not to exceed \$1,000 as determined by the commission; the annual renewal license fee is an amount not to exceed \$300 as determined by the commission;

(I) service station and bottle exchanges: any service station and bottle activity set out in categories "F" and "G" of this section; the category "I" application and original license fee is an amount not to exceed \$150 as determined by the commission; the annual renewal license fee is an amount not to exceed \$70 as determined by the commission;

(J) service station and bottle dealerships: the operation of a bottle-filling and container-exchange dealership, including bottle filling and the sale, transportation, installation, and connection of bottled LPG, and the operation of an LPG service station as set out in category "G"; the category "J" application and original license fee is an amount not to exceed \$1,000 as determined by the commission; the annual renewal license fee is an amount not to exceed \$300 as determined by the commission;

(K) distribution system: the sale and distribution of LPG through mains or pipes and the installation and repair of LPG systems; the category "K" application and original license fee is an amount not to exceed \$1,000 as determined by the commission; the annual renewal license fee is an amount not to exceed \$300 as determined by the commission;

(L) carburetion: the sale and installation of LPG motor fuel containers, and the sale and installation of LPG motor fuel systems; application and original license fee is an amount not to exceed \$100 as determined by the commission; annual renewal license fee is an amount not to exceed \$50 as determined by the commission.

(Section 113.083 reserved for expansion.)

#### **Section 113.084. Application**

(a) An application for license as a dealer in LPG shall be submitted to the commission on forms furnished by the commission or on a facsimile of those forms.

(b) A prospective licensee shall submit the required application together with the original nonrefundable license fee required by Section 113.082 of this code for each category for which a license application is made. The applicant shall submit additional information and data with each application as the commission may reasonably require.

(c) A licensee shall submit the nonrefundable renewal fee for each category for which license is sought along with information and data the commission may reasonably require.

*(Section 113.085-113.086 reserved for expansion)*

#### **Section 113.087. Examination and Seminar Requirements REVISED 9/1/83**

(a) The satisfactory completion of the requirements of this section is mandatory, and operations requiring an LP-gas license may not commence, continue, or resume unless examination and seminar requirements are fulfilled.

(b) Before license issuance, the commission shall require the individual designated as the licensee's representative to the commission to provide good and sufficient proof through examination prepared and administered by the commission of working knowledge of this chapter and rules of the commission which affect the category of license for which application is made. Thereafter, each licensee shall maintain a qualified representative at all times.

(c) Each individual who will be actively supervising those operations requiring any license under this chapter at any outlet or location, as designated by the commission, shall be required to provide good and sufficient proof through examination prepared and administered by the commission that the supervisor has a working knowledge of the safety requirements and penalties in this chapter and the rules of the commission which apply to that category of license.

(d) As determined by commission rule, each individual who is or will be utilized by a licensee in LPG-related activities shall be required to provide good and sufficient proof through examination prepared and administered by the commission that the employee has a working knowledge of the safety requirements in the rules of the commission relating to the activity or activities.

(e) No licensee may employ or otherwise utilize any person as a representative to the commission, nor as a supervisor or employee in LPG-related activities, unless and until the person has qualified by satisfactory completion of the examination requirements established by this section.

(f) The commission shall promulgate rules relating to changes in representatives, supervisors, and employees, and may permit temporary exemption from the examination requirements for a maximum period of 45 days.

(g) In no event shall an original license be issued to an applicant when the representative's required examination was last taken and passed more than five years before the proposed date of license issuance.

(h) Satisfactory completion of any required examination under this section shall accrue to the individual.

(i) Not later than the 30th day on which an examination is administered under this section, the commission shall notify each examinee of the results of the examination. If the notice of the examination results will be delayed longer than 90 days after the examination date, the commission shall notify the examinee of the reason for the delay before the 90th day.

(j) If requested in writing by a person who fails the licensing examination administered under this section, the commission shall furnish the person with an analysis of the person's performance on the examination.

(k) The examination, by appropriate rule, may require, in addition to examination requirements as set out in Subsections (b), (c), and (d) of this section, attendance at approved academic, trade, professional, or commission-sponsored seminars, other continuing education programs, and periodic reexaminations.

**Section 113.088. Examination; Seminar Fees.**

(a) The commission shall establish reasonable examination and seminar registration fees.

(b) Before seminar attendance or examination of any person, except as provided in Subsection (c) of this section, the commission shall receive a nonrefundable fee for each examination or seminar registration.

(c) The commission may exempt voluntary firemen, or public employees of the State of Texas, federal government, or state or federal subdivisions from seminar fees.

**113.089. Special Requirements for Licensing.**

(a) If application is made for a license under category "E" of Section 113.082 of this code or any other category specified by commission rule, the commission, in addition to other requirements, shall have an actual inspection conducted of any and all facilities, bulk storage equipment, transportation equipment, and dispensing equipment of the applicant to verify satisfactory compliance with all current safety laws, rules, and practices.

(b) The inspection shall be performed before licensing, but in no event later than 15 days after the inspection is requested in writing by the applicant for license.

(c) A category "E" license and any other license specified by commission rule shall not be issued until the inspection under Subsection (a) of this section verifies the applicant to be in satisfactory compliance with all current safety laws, rules, and practices.

*(Section 113.090 reserved for expansion)*

**Section 113.091. License Denial.**

(a) Should an applicant fail to meet the requirements for original or renewal licensing set out in this chapter, the commission shall have written notification prepared promptly and mailed to the applicant. The notice shall specify the reason for the applicant's failure to qualify for license and advise the applicant of the right to request a hearing.

(b) Within 30 days of the notice of denial, an applicant for license under this chapter who is denied a license may request a hearing to determine whether or not the applicant has complied in all respects with the licensing procedure applicable to the category or categories of license sought. The applicant's request for hearing must be in writing and delivered to the director of the LP-gas division.

(c) A hearing to determine an applicant's compliance with the licensing procedure applicable to the category or categories of license sought must be scheduled within 30 days following receipt of a request under Subsection (b) of this section.

(d) If the record made at the hearing supports the applicant's claim, the commission shall enter an order in its records to that effect, noting the category or categories for which the applicant is found entitled to be licensed, and the commission shall have the license or licenses issued. If the applicant is found unqualified, the commission shall likewise enter an order in its records to that effect, and no license may be issued to the applicant.

**Section 113.092. License Issuance.**

(a) The commission shall issue the appropriate license to an applicant who has satisfied the licensing procedures and requirements set out in this chapter and in the rules of the commission.

(b) The license shall be issued in the name under which the applicant proposes to conduct business.

(c) The license shall belong to the applicant to which it is issued and shall be nontransferable.

### **Section 113.093. License Renewal.**

(a) A license issued pursuant to this chapter is renewable on the timely payment or tender of the renewal license fee before the expiration date of the license each year.

(b) If a person's license has been expired for not longer than 90 days, the person may renew the license by paying to the commission the required renewal fee and a fee that is one-half of the amount of the renewal fee for the license.

(c) If a person's license has been expired for longer than 90 days but less than two years, the person may renew the license by paying to the commission all unpaid renewal fees and a fee that is equal to the amount of the unpaid renewal fees for the license.

(d) If a person's license has been expired for two years or longer, the person may not renew the license. The person may obtain a new license by complying with the requirements and procedures for obtaining an original license.

(e) A renewal license will be issued to a licensee as soon as is practicable after compliance with this section, and fulfillment of insurance, examination, and seminar requirements established by this chapter, and submission of any information and data the commission may reasonably require.

(f) Renewal license fees shall be nonrefundable.

(g) At least 30 days before the expiration of a person's license the commission shall notify the person in writing of the impending license expiration and shall attempt to obtain from the person a signed receipt confirming receipt of the notice.

### **Section 113.094. Staggered Renewal of Licenses. EFFECTIVE 9/1/83**

The commission, by rule, may adopt a system under which licenses expire on various dates during the year. For the year in which the license expiration date is changed, license fees payable on a specified date shall be prorated on a monthly basis so that each licensee shall pay only that portion of the license fee that is allocable to the number of months during which the license is valid. On renewal of the license on the new expiration date, the total license fee is payable.

### **Section 113.095. License by Endorsement. EFFECTIVE 9/1/83**

The commission may waive any license requirement for an applicant with a valid license from another state having license requirements substantially equivalent to those of this state.

*(Section 113.096 reserved for expansion)*

### **Section 113.097. Insurance Requirement.**

(a) The commission shall not issue a license authorizing activities under Section 113.082 of this code or renew an existing license unless the applicant for license or license renewal provides proof of required insurance coverage with an insurance carrier authorized to do business in this state.

(b) A licensee shall not perform any licensed activity under Section 113.082 of this code unless the insurance coverage required by this chapter is in effect.

(c) Except as provided in Section 113.099 of this code, the types and amounts of insurance provided in Subsections (d) through (g) of this section are required while engaged in any of the activities set forth in Section 113.082 of this code or any activity incidental thereto.

(d) A category "C," "E," "H," or "J" licensee must carry automobile bodily injury and property damage liability coverage on each motor vehicle, including trailers and semitrailers, used to transport LP-gas. The commission shall establish by rule a reasonable amount of coverage to be maintained, except that coverage shall not be less than the amounts required as proof of financial responsibility

under the Texas Motor Vehicle Safety-Responsibility Act, as amended (Article 6701h, Vernon's Texas Civil Statutes).

(e) All licensees must carry general liability coverage in a reasonable amount, based on the type or types of licensed activities, which shall be established by commission rule.

(f) All licensees must carry workers' compensation, including employer's liability coverage.

(g) A category "A," "C," or "E" licensee must carry completed operations and products liability insurance in a reasonable amount, based on the type or types of licensed activities, which shall be established by commission rule.

#### **Section 113.098. Insurance Conditions.**

(a) As evidence that required insurance has been secured and is in force, certificates of insurance shall be filed with the division before licensing and license renewal.

(b) All certificates filed under this section shall be continuous in duration.

(c) Cancellation of a certificate of insurance becomes effective on the occurrence of any of the following events and not before:

(1) division receipt of written notice stating the insurer's intent to cancel a policy of insurance and the passage of time equivalent to the notice period required by law to be given the insured before the insurance cancellation;

(2) receipt by the division of an acceptable replacement insurance certificate;

(3) voluntary surrender of a license and the rights and privileges conferred by the licensee; or

(4) division receipt of a statement made by a licensee stating that the licensee is not actively engaging in any operations which require a particular type of insurance and will not engage in those operations unless and until all certificates of required insurance applicable to those operations are filed with the division.

(d) Cancellation under subsection (c) of this section shall not become effective until approved by the commission.

#### **Section 113.099. Statements in Lieu of Insurance Certificates.**

(a) A category "C," "E," "H," or "J" licensee or applicant for license that does not operate or contemplate the operation of a motor vehicle equipped with an LP-gas cargo tank and does not transport or contemplate the transportation of LP-gas by vehicle in any manner, may make and file with the division a statement to that effect in lieu of filing a certificate of automobile bodily injury and property damage insurance.

(b) A licensee or applicant for a license that does not engage in or contemplate engaging in any operations which would be covered by general liability insurance for a period of time may make and file with the division a statement to that effect in lieu of filing a certificate of general liability insurance.

(c) A licensee or applicant for license that does not employ or contemplate the hiring of an employee or employees to be engaged in LPG-related activities may make and file with the division a statement to that effect in lieu of filing a certificate of workers' compensation insurance including employer's liability insurance.

(d) A category "A," "C," or "E" licensee or applicant for a license that does not engage in or contemplate engaging in any LP-gas operations which would be covered by completed operations and products liability for a period of time may make and file with the division a statement to that effect in lieu of filing a certificate of completed operations and products liability insurance.

(e) Any statement filed pursuant to Subsections (a) through (d) of this section must further state that the licensee or applicant agrees to file a certificate of insurance evidencing appropriate coverage



before engaging in any activities that require insurance coverage under this subchapter.

*(Sections 113.100 and 113.101 reserved for expansion)*

**Section 113.102. Prior Licenses.**

(a) Except as provided in Subsection (c) of this section, all prior LP-gas licenses authorizing activities previously defined by this Chapter as categories 1 through 12 shall, on an applicant's compliance with the renewal procedure set out in this chapter, be converted to a license identified by category letter as specified in Subsection (b) of this section.

(b) A category "1" license shall become a category "A" license, and a category "4" shall become a category "C"; a "5," a "D"; a "6," an "E"; an "8," an "F"; a "9," a "G"; a "10," a "K"; an "11," an "H"; an "8," and "9," an "I"; an "8," "9," "11," and "12," a "J"; and an "8," "9," "11," and "5," a "J"; a "7," an "L", as those letter categories are defined in Section 113.082 of this code.

(c) Previously issued licenses designated as authorizing category "2" or "3" activities shall expire.

*(Sections 113.103-113.130 reserved for expansion)*

**SUBCHAPTER E. MOTOR VEHICLES AND TESTING LABORATORIES**

**Section 113.131. Transport Trucks and Trailers.**

(a) Each transport truck, trailer, or other motor vehicle equipped with an LPG cargo tank and each truck used principally for transporting LPG in portable containers shall be registered with the commission.

(b) A licensee who has purchased, leased, or obtained other rights to use any unit described in Subsection (a) of this section shall register that unit in the name or names under which the licensee conducts business before the transportation of LPG by means of that unit.

(c) An ultimate consumer of LPG who has purchased, leased, or obtained other rights to use any unit described in Subsection (a) of this section shall register that unit in the person's name before the transportation of LPG by means of that unit on public roads or highways.

(d) The registration fee for each unit is \$150 a year for any LPG cargo trailer or semitrailer and \$100 a year for any bobtail or bottle-delivery unit.

(e) Any unit registered pursuant to this section shall be covered by automobile bodily injury and property damage liability insurance as prescribed by Section 113.097 of this code.

(f) Any delivery or transport driver shall meet the applicable examination and seminar requirements set out in Section 113.087 of this code.

*(Section 113.132 reserved for expansion)*

**Section 113.133. Motor Carrier Laws.**

No provision of this chapter shall be construed to modify, amend, or revoke any motor carrier law of this state.

**Section 113.134. Department of Public Safety.**

The Department of Public Safety shall cooperate with the commission in the administration and enforcement of this chapter and the rules promulgated under this chapter to the extent that they are applicable to motor vehicles.

**Section 113.135. Testing Laboratories.**

(a) Any person that proposes to test any container for the purpose of determining the safety of the container for LP-gas service shall apply for registration with the commission and provide any information the commission shall reasonably require.

(b) The commission shall determine the sufficiency of the application and shall act on each

application by approving or denying the registration pursuant to the standards set out in Subsections (c) and (d) of this section.

(c) Should it appear to the commission that an applicant is unqualified to conduct or continue to conduct container testings with the expertise or thoroughness necessary to accurately determine the safety of a container for LP-gas service, a formal hearing shall be held following notice of the hearing, and a determination of the qualifications of the applicant or registrant shall be made.

(d) Should competent evidence presented at the hearing establish that the applicant or registrant is unqualified to determine the safety of a container for LP-gas service, the registration of that person shall be denied or revoked.

*(Sections 113.136 - 113.160 reserved for expansion)*

## **SUBCHAPTER F. SUSPENSION AND REVOCATION OF LICENSES AND REGISTRATIONS**

### **Section 113.161. Violations of Chapter or Rules; Informal Actions.**

(a) The commission shall notify a licensee or registrant in writing when it finds probable violation or noncompliance with this chapter or the safety rules promulgated under this chapter.

(b) The notification shall specify the particular acts, omissions, or conduct comprising the alleged violation and shall designate a date by which the violation must be corrected or discontinued.

(c) The licensee or registrant shall report timely compliance or shall request extension of time for compliance if deemed necessary.

(d) If a licensee or registrant objects to the complaint or requirements under this section, or if the commission determines that the licensee or registrant is not proceeding adequately to compliance, then, on written request of the licensee or registrant or order of the commission, a public hearing shall be conducted as provided in Section 113.162 of this code.

(e) If the commission or division determines that the probable violation or noncompliance constitutes an immediate danger to the public health, safety, and welfare, it shall require the immediate cessation of the probable violation or noncompliance and proceed with a hearing as provided in Section 113.162 of this code.

### **Section 113.162. Hearings.**

Any hearing or proceeding under this chapter shall be subject to the provisions of the Administrative Procedure and Texas Register Act.

### **Section 113.163. Findings and Judgment. REVISED 9/1/83**

(a) If the commission finds that the licensee or registrant has violated or failed to comply with or is violating or failing to comply with this chapter or a rule or standard promulgated and adopted under this chapter, or both, the commission may suspend the license or registration for a definite period not to exceed 90 days or may revoke the license or registration. If the commission determines that no violation has occurred or is occurring, its order shall so state.

(b) The commission may place on probation a person whose license or registration has been suspended under subsection (a) of this section, but if the commission does place the licensee or registrant on probation and does allow him to continue to operate, the fact that the license or registration has been suspended and the licensee or registrant has been put on probation shall appear in the records of the commission relating to the suspension and probation.

### **Section 113.164. Appeal.**

Any party to a proceeding before the commission is entitled to judicial review under the substantial evidence rule.

[Sections 113.165-113.200 reserved for expansion]

## **SUBCHAPTER G. FEES AND FUNDS**

### **Section 113.201. Deposit and Expenditure of Fees and Funds.**

Money received by the commission under this chapter shall be deposited in the state treasury to the credit of the liquefied petroleum gas division and spent in accordance with the appropriations made by law.

[Sections 113.202-113.230 reserved for expansion]

## **SUBCHAPTER H. ENFORCEMENT**

### **Section 113.231. Injunctions.**

(a) On request of the commission, the attorney general may bring an action in the name and on behalf of the state to enjoin a person from committing any act that violates or does not comply with any provision of this chapter or of any rule promulgated under this chapter.

(b) A suit for injunction instituted pursuant to Subsection (a) of this section shall be in addition to any other remedies at law or in equity.

(c) A district court of any county in which it is shown that all or part of the acts have been or are about to be committed has jurisdiction of an action brought under Subsection (a) of this section.

(d) No bond for injunction may be required of the commission or the attorney general in relation to a proceeding instituted pursuant to Subsection (a) of this section.

### **Section 113.232. General Penalty. REVISED 8/29/83**

(a) In addition to injunctive relief and other penalties provided in this chapter, a person who knowingly violates or fails to comply with this chapter or rules adopted under this chapter is guilty of a misdemeanor and is punishable by a fine of not less than \$25 and not more than \$200.

(b) A person previously convicted under Subsection (a) of this section who knowingly violates or fails to comply with this chapter is guilty of a misdemeanor punishable by a fine of not less than \$200 nor more than \$2,000.

(c) A penalty prescribed by this section is in addition to injunctive relief and other penalties provided by this chapter.

(d) Each day the violation or failure to comply continues constitutes a separate offense.

### **Section 113.233. Entry for Inspection.**

An inspector, employee, or agent of the commission may enter the premises of a licensee under this chapter or any building or other premises open to the public at any reasonable time for the purpose of determining and verifying compliance with this chapter and the safety rules of the commission.

### **Section 113.234. Warning Tag.**

An inspector, employee, or agent of the commission may declare any container, appliance, equipment, transport, or system that does not conform to the safety requirements of this chapter or rules adopted under this chapter, or which is otherwise defective, as unsafe or dangerous for LP-gas service and shall attach a warning tag in a conspicuous location.

### **Section 113.235. Supplying or Removing LPG After Warning Tag Attached.**

(a) Any person who knowingly sells, furnishes, delivers, or supplies LPG for storage in or use or consumption by or through a container, appliance, transport, or system to which a warning tag is

attached is guilty of a misdemeanor and on conviction is punishable by a fine of not less than \$50 and not more than \$2,000.

(b) LP-gas shall be removed from a container to which a warning tag is attached only under the direction of the commission.

**Section 113.236. Penalty for Unauthorized Removal of Tag.**

An unauthorized person who knowingly removes, destroys, or in any way obliterates a warning tag attached to a container, appliance, transport, or system is guilty of a misdemeanor and on conviction is punishable by a fine of not less than \$50 and not more than \$2,000.

**SECTION 2.** All current LPG licenses and registrations duly issued by the commission before September 1, 1980, shall be deemed valid in all respects and may be renewed on September 1, 1980, as provided in this Act without penalty or other abridgement of rights or privileges.

**SECTION 3.** Sections 113.085, 113.086, and 113.090, Natural Resources Code, are repealed.

**SECTION 4.** (a) Section 3 of this Act takes effect immediately.

(b) Sections 1 and 2 of this Act shall become effective for all purposes on September 1, 1980; provided, from and after enactment, this entire Act shall be effective for planning purposes as necessary to permit development by the railroad commission of rules and procedures for handling original and renewal license and registration applications, examinations, forms, and other requirements, and for collection of license and registration fees as provided in this Act for original licenses and registrations to be issued and for licenses and registrations to be renewed on and after September 1, 1980.

**SECTION 5.** The importance of this legislation and the crowded condition of the calendars in both houses create an emergency and an imperative public necessity that the constitutional rule requiring bills to be read on three several days in each house be suspended, and this rule is hereby suspended.

**TEX. REV. CIV. STAT. ART. 6053. REGULATION OF UTILITIES.**

**SECTION 1.** *(This Section not reprinted as it pertains exclusively to Natural Gas Operations.)*

**Malodorants, investigation and regulation**

**SECTION 2.** In addition to the duties and powers of the Commission hereinabove set forth, it is empowered and it shall be its duty to investigate the use of malodorants by persons, firms, or corporations engaged in the business of handling, storing, selling, or distributing natural and liquefied petroleum gases, including butane and other odorless gases, for private or commercial uses, or supplying the same by pipe lines or otherwise, to any public building or buildings, or to the general public, and the Commission is empowered to require such persons, firms, or corporations to odorize such gas by the use of a malodorant agent of such character as to indicate by a distinctive odor the presence of gas; such malodorant agent so required to be used, however, shall be non-toxic and non-corrosive and not harmful to leather diaphragms in gas equipment, the method of its use and containers and equipment to be used in connection therewith to be under the direction of and as approved by the Railroad Commission of Texas; the Commission having full power and authority to prescribe such rules and regulations as in its wisdom may be deemed necessary to carry out the purposes of this Act. Nothing herein contained shall apply to gas transported out of the State of Texas.

*As amended Acts 1939, 46th Leg., p. 501, §1.*

**RAILROAD COMMISSION OF TEXAS**  
**LIQUEFIED PETROLEUM GAS DIVISION**

APPLICATION FOR LICENSE YEAR 19 \_\_\_\_\_

LICENSE NO. \_\_\_\_\_

Date Issued \_\_\_\_\_

**NOTICE:** ALL LICENSES EXPIRE MIDNIGHT CENTRAL STANDARD TIME ON AUGUST 31. ANY DEALER WHO OPERATES AFTER SUCH TIME WITHOUT A RENEWAL LICENSE WILL BE IN VIOLATION OF THE LAW. DIVISION ACTION WILL BE TAKEN AGAINST VIOLATORS.

The applicant applies herein for a license as required under the terms and provisions of Chapter 113 of the Texas Natural Resources Code.

This applicant (1) \_\_\_\_\_  
(Name(s) Under Which Business Is To Be Transacted)

(if different from last year, please list \_\_\_\_\_ )

located in (2) \_\_\_\_\_, (3) \_\_\_\_\_, (4) \_\_\_\_\_  
(City) (County) (State)

is a (5)  Sole Proprietor

Partnership

Corporation, which is incorporated under the laws of the State of \_\_\_\_\_

Other (specify type) \_\_\_\_\_

(6) List owner of sole proprietorship, partners in partnership, or officers of corporation.

NAME	CAPACITY	FULL ADDRESS

Category or Categories under which business is to be conducted: (7) \_\_\_\_\_

(State fully the extent of your operation)

Have you heretofore been licensed to engage in the liquefied petroleum gas business in Texas? (8) \_\_\_\_\_

If so, give month and year in which your last license was issued: (9) \_\_\_\_\_, 19 \_\_\_\_\_

All records required will be kept available for the inspection of authorities at the following address:

(10) \_\_\_\_\_  
(Street Address) (City or Town) (State)

(11) Company Representative(s); any individual employed by the company who is directly responsible for and actively supervising the LP-Gas operations and has passed the examination for license:

NAME	SOCIAL SECURITY NO.	ADDRESS OF COMPANY	TELEPHONE NO.

(12) Branch Manager: (To be completed only by companies with multi-dealership outlets) any individual(s) employed by the company who are directly responsible for and actively supervising the LP-Gas operations of the dealership at each outlet which have passed the Branch Manager Examination:

NAME	SOCIAL SECURITY NO.	ADDRESS OF OUTLET	TELEPHONE NO.
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I, THE UNDERSIGNED APPLICANT, DO HEREBY CERTIFY THAT I HAVE IN MY REGULAR EMPLOY ONLY EMPLOYEES WHO HAVE PASSED QUALIFYING EXAMINATIONS AS PROVIDED IN SECTION 113.087, TEX. NAT. RESOURCES CODE, EXCEPT AS FOLLOWS:

(13) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

My address to be used by the Railroad Commission of Texas for all official communication is:

(14) \_\_\_\_\_ (15) \_\_\_\_\_ (16) \_\_\_\_\_  
 (Mailing Address) (Town or City) (State)  
 (17) \_\_\_\_\_ (18) \_\_\_\_\_ (19) Telephone No. \_\_\_\_\_  
 (Zip Code) (Section or Person) (A/C) (Number)

IT IS FURTHER UNDERSTOOD THAT I, OR WE, ARE FAMILIAR WITH THE REQUIREMENTS OF THE ABOVE-MENTIONED STATUTE WITH REGARD TO PROVISIONS PERTAINING TO THE DUTIES OF THE LICENSEE AND THAT I, OR WE, WILL COMPLY WITH EACH AND EVERY PROVISION CONTAINED IN SAID ACT, AND WILL FURNISH ALL ADDITIONAL INFORMATION REQUESTED BY THE RAILROAD COMMISSION PURSUANT TO ITS REGULATORY AUTHORITY.

I, OR WE, AGREE THAT ANY CHANGE IN OWNERSHIP, OR CHANGE IN NAME, WILL BE REPORTED TO THE RAILROAD COMMISSION OF TEXAS BY REGISTERED MAIL EITHER PRIOR TO THE CHANGE IN OWNERSHIP OR CHANGE IN NAME OR PRIOR TO OPERATING AS AN LPG DEALERSHIP UNDER NEW OWNERSHIP OR UNDER A CHANGED NAME.

STATE OF \_\_\_\_\_ )

COUNTY OF (20) \_\_\_\_\_ )

I DECLARE UNDER PENALTIES PRESCRIBED IN § 91.143 OF THE TEXAS NATURAL RESOURCES CODE THAT I AM AUTHORIZED TO MAKE THIS REPORT, THAT THIS REPORT WAS PREPARED BY ME OR UNDER MY SUPERVISION AND DIRECTION, AND THAT DATA AND FACTS STATED HEREIN ARE TRUE, CORRECT, AND COMPLETE, TO THE BEST OF MY KNOWLEDGE.

(21) FOR USE BY SOLE PROPRIETOR ONLY.

X

Date \_\_\_\_\_ Signature of Owner \_\_\_\_\_

(22) FOR PARTNERSHIP USE ONLY:

X

Date \_\_\_\_\_ Signature of a Partner \_\_\_\_\_  
 Title \_\_\_\_\_

(23) FOR CORPORATE USE ONLY:

(Corporate Seal) \_\_\_\_\_ Name(s) under which business is to be transacted \_\_\_\_\_

ATTEST: (24) Signed by X \_\_\_\_\_  
 (25) X \_\_\_\_\_ Name and Capacity of Subscriber\*\*

Corporate Secretary \_\_\_\_\_  
 Date \_\_\_\_\_

\* Subscriber must be president or vice-president of corporation unless exception is granted by LP Gas Division Director.

\*\* The Board of Directors may file with this form a Power of Attorney designating a corporate officer whose signature will bind the corporation. In such case only one signature is necessary.

RAILROAD COMMISSION OF TEXAS

1984



1985

LIQUEFIED PETROLEUM GAS DIVISION

LICENSE  
NON - TRANSFERABLE

**VOID**

Expires at Midnight, August 31, 1985

*Thomas A. Petru*  
Acting Director, Liquefied Petroleum Gas Division

**IMPORTANT LEGAL NOTICE**

THE INTENT TO CHANGE OWNERSHIP OF OR PROPERTY RIGHTS IN TRUCK TANK(S) MUST BE REPORTED TO THE LPG DIVISION EITHER:

\*1 PRIOR TO SUCH CHANGE

OR

\*2 PRIOR TO THE USE OF  
TRANSFERRED TANK(S)

FOR LPG STORAGE OR TRANSPORT AFTER SUCH CHANGE

**PLACEMENT INSTRUCTIONS**

IT IS IMPORTANT THAT THE DISPLAY SURFACE BE CLEAN OF ALL OIL OR GREASE AND THOROUGHLY DRIED BEFORE APPLYING DECAL.

- \*1 CAREFULLY REMOVE THE DECAL FROM IT'S BACKING AT SCORE LINE
- \*2 PLACE DECAL AS SHOWN IN PICTURE ON DECAL BACKING

ONCE AFFIXED, DECAL CANNOT BE REPOSITIONED OR REMOVED WITHOUT GREAT DAMAGE

**LIQUEFIED PETROLEUM GAS DIVISION**

1984

1985

**VOID**Decal No 3511

L. P. G. Form 4

Expires Aug. 31, 1985







**RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION  
MANUFACTURER'S REPORT OF PRESSURE VESSEL REPAIR OR MODIFICATION**

1. Vessel repaired or modified by \_\_\_\_\_ Date \_\_\_\_\_
2. Original Manufacturer \_\_\_\_\_ Date \_\_\_\_\_
3. Serial Number \_\_\_\_\_
4. Owner of Vessel \_\_\_\_\_
5. Description of repairs or modifications (For additional space use reverse side.) \_\_\_\_\_

VOID

6. Description of tests performed after repair \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

I declare under penalties prescribed in §91.143, Tex. Nat. Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Date \_\_\_\_\_ Signed \_\_\_\_\_ Title \_\_\_\_\_ LPG License No. \_\_\_\_\_

CERTIFICATE OF SHOP INSPECTION	
Inspection Agency's Serial No. _____	
Vessel repaired or modified by _____ at _____	
<p>I, the undersigned, holding a Certificate of Competency as an Inspector of Boilers and Unfired Pressure Vessels in the State of Texas and employed by _____ of _____ inspected the repair or modification of the vessel described in this report on _____, 19____, and certify that the statements made in this report are correct and that repair or modification of this vessel was in accordance with the ASME Code for Unfired Pressure Vessels.</p>	
Date _____, 19____.	
_____ Inspector's Signature	_____ Commissions

**RAILROAD COMMISSION OF TEXAS**  
**LIQUEFIED PETROLEUM GAS DIVISION**  
**MASTER OR JOURNEYMAN PLUMBER AFFIDAVIT**

I \_\_\_\_\_ residing at  
Master or Journeyman Plumber's Name

\_\_\_\_\_  
Address City County  
\_\_\_\_\_  
State Zip Code

do hereby certify that I am a Master or Journeyman Plumber duly licensed by the Texas State Board of Plumbing Examiners; have read the **Safety Rules of the Liquefied Petroleum Gas Division**; and will follow these rules when installing, repairing, or altering and testing any LP-gas system or installing, repairing, or modifying and testing LP-gas appliances.

Certified this the \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_  
(Date Affidavit Signed)

\_\_\_\_\_  
Signature of Master or Journeyman Plumber

\_\_\_\_\_  
State Board License Number

\_\_\_\_\_  
Social Security No.

My telephone number to be used by the Railroad Commission of Texas for all official communications is

\_\_\_\_\_  
A.C. Number

This affidavit and a copy of your current plumbing license must be filed with the Railroad Commission of Texas, LP-Gas Division, P.O. Drawer 12967, Austin, Texas 78711; and will expire one (1) year from the date of certification.

The Director of the LP-Gas Division may revoke the exception to licensing provided by this affidavit when the Director finds probable violation or non-compliance with the **Safety Rules of the Liquefied Petroleum Gas Division**; and the Master or Journeyman Plumber shall be subject to the penalties prescribed in Subchapter H of Chapter 113 of the Texas Natural Resources Code.

LPG Form No. 15  
Rev. 9/83

Return to:  
 LPG Div., RRC of Texas  
 P.O. Drawer 12967  
 Capitol Station  
 Austin, Texas 78711

**RAILROAD COMMISSION OF TEXAS**  
**LIQUEFIED PETROLEUM GAS DIVISION**  
**Application For Examination**

Name of Applicant (Last, First, Middle)		(Social Security #)	
Date Employed by Company			
Name of Licensed Company		(LPG License #)	
Company Address: (P. O. Box and/or Street)		(City or Town)	
(County)	(State)	(Zip Code)	(A/C) (Business Phone #)
Check the Appropriate Spaces			
Examination Applied For:			
(1)	<input type="checkbox"/>	License (company representative) Category/categories applied for _____	State Nature & full extent of LP-Gas operations to be conducted _____
(2)	<input type="checkbox"/>	Branch Manager (supervisor) Category/categories applied for _____	State Nature & full extent of LP-Gas operations to be conducted _____
(3)	<input type="checkbox"/>	Employee	<b>NOTE: EMPLOYEES ARE TEMPORARILY EXEMPT FROM THE EXAMINATION REQUIREMENTS FOR A MAXIMUM PERIOD OF 45 DAYS FROM DATE OF EMPLOYMENT.</b>
Type(s) of employee examination applying for:			
(A)	<input type="checkbox"/>	Delivery Truck Driver and Service & Installation	(D) <input type="checkbox"/> Carburetion
(B)	<input type="checkbox"/>	Service & Installation	(E) <input type="checkbox"/> ICC/DOT Bottle Filling
(C)	<input type="checkbox"/>	Transport Driver	(F) <input type="checkbox"/> Motor Fuel Dispenser

Field Exams and seminar schedules will accompany your study guide and will be provided to you upon receipt of this application. If you prefer, examination(s) are given any workday, Monday through Friday (holidays excepted), at the Division's headquarters located at: 105 W. Riverside Drive, Room 214, Austin, Texas.

RRC USE ONLY	
Register #	_____
Amt.	Type _____
Date	_____
Approved	_____

I declare under penalties prescribed in § 91.143 of the Texas Natural Resources Code that I am authorized to make this application, that I have knowledge of the above-stated facts, that this application was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct and complete to the best of my knowledge.

(X) \_\_\_\_\_  
 (Signature of Applicant)

\_\_\_\_\_  
 (Date)

## Study Material for Examinations

### License Exams (Company Representative)

All categories for license must study the Requirements & Procedures, Basic Rules, and the Natural Resources Code, Chapter 113; as well as the following divisions:

#### Category

A — ICC - DOT Fabricators only	I, XI
A1 — ASME Fabricators only	II, III, IV, V, X
B — Transport Outfitters	IV, V, VII
B1 — Special	IV, V, VII
C — Carriers	III, IV
D — General Installers and Repairmen	I, II, VI, VII, VIII
D1 — Special	I, II, VI, VII, VIII
E — Retail and Wholesale Dealer	All Divisions
E1 — Special	IV
F — Bottle Exchanges	I, IX
G — Service Station	V, IX
H — Bottle Dealers	I, IX
I — Service Station & Bottle Exchange	I, V, IX
J — Service Station & Bottle Dealerships	I, V, VII, IX
K — Distribution System	VII, VIII
L — Carburetion	V, XI

### Manager Exams (Supervisor)

Study the same sections as for license exams except the Requirements & Procedures, and study only the general penalty sections of the Natural Resources Code, Chapter 113.

### Employee Exams

Study the Basic Rules and the following divisions:

Delivery Truck Driver and Service and/or Installation	I, II, III, IV, VII, VIII, & X
Service and/or Installation	I, II, VII, & VIII
Transport Truck Driver	III & IV
Carburetion Service and/or Installation	V, & XI
ICC/DOT Bottle Filling	I & IX
Motor Fuel Dispenser	V & IX

### EXAMINATION FEES

#### (1) Representative's Examination

- (A) Categories "A" and "E" - \$50 each
- (B) Categories "B" and "C" - \$25 each
- (C) All other categories - \$10 each

#### (2) Supervisor's Examination

- (A) Initial examination - No charge
- (B) Failure examination - See (1) Representative's Examination (A), (B), & (C).

#### (3) Employee's Examination

- (A) Initial examination - No charge
- (B) Failure examination - \$15

Applicants should request a written receipt for each fee paid.

**RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION**

(1) NAME \_\_\_\_\_

(2) ADDRESS \_\_\_\_\_

REPORT OF ODORIZATION OF LIQUEFIED PETROLEUM GASES FOR THE QUARTER ENDING \_\_\_\_\_ 19\_\_

TYPE OF GAS	(3) GALLONS GAS MANUFACTURED DURING PERIOD	(4) GALLONS GAS ODORIZED	(5) QUANTITY OF MALODORANT USED Gals. or Lbs.	(6) NAME OF MALODORANT
BUTANE				
PROPANE				
...% BUTANE ...% PROPANE MIXTURE				
...% BUTANE ...% PROPANE MIXTURE				
(7) TOTALS			- - - - - Gals. - - - - - Lbs.	X X X X X X X X

**READ ALL OF THIS PAGE CAREFULLY BEFORE MAKING OUT REPORT:**

Every person, firm or corporation who odorizes liquefied petroleum gas in any form shall make a quarterly report to the L. P. Gas Division of the Railroad Commission of Texas within thirty (30) days after November 30, February 28, May 31, and August 31. The receipt of a copy of this form is an indication that the records of the L. P. Gas Division of the Railroad Commission show that you are a handler of liquefied petroleum gas products who odorizes LP Gas. If this is incorrect, you will insert your name and address where indicated and write across the report "I do not odorize liquefied petroleum gas in any form," sign the report and forward it to the Liquefied Petroleum Gas Division, Railroad Commission of Texas, P. O. Drawer 12967, Austin, Texas 78711.

**INSTRUCTIONS FOR MAKING OUT REPORTS:**

**FILL IN YOUR FIRM NAME AND ADDRESS AT THE TOP OF THE FORM. IF YOU OPERATE UNDER MORE THAN ONE NAME SHOW ALL NAMES AND ADDRESSES. COMPLETE AND EXECUTE PROPERLY BEFORE FORWARDING THE REPORT TO THE LIQUEFIED PETROLEUM GAS DIVISION.**

The report must be signed by some person in authority having personal knowledge of the facts. If necessary, use extra sheets and attach to the report. Strict compliance with these instructions will be required of all persons, firms or corporations who odorize LP Gas.

(8) THE STATE OF TEXAS )  
COUNTY OF \_\_\_\_\_ )

I declare under penalties prescribed in §91.143, Tex. Nat. Resources Code, that I am authorized to make this report as I have personal knowledge of the above-stated facts, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete to the best of my knowledge.

(9)  X   
SIGNATURE \_\_\_\_\_

(10) \_\_\_\_\_  
DATE

(11) \_\_\_\_\_  
TITLE

RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION

AFFIDAVIT OF LOST OR DESTROYED LICENSE

I, \_\_\_\_\_, \_\_\_\_\_,  
(Affiant's Name) (Affiant's Capacity/Authorization)

do make this affidavit saying that \_\_\_\_\_  
(Name(s) under which Licensee conducts LPG operations)

is licensed by the Railroad Commission of Texas and that Liquefied Petroleum Gas License No. \_\_\_\_\_

issued on \_\_\_\_\_, 19 \_\_\_\_\_, has been lost or stolen and that facts pertaining to  
the existence and location of such license are unknown to the licensee.

THE STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I declare under penalties prescribed in §91.143 of the Texas Natural Resources Code that I am authorized to make  
this affidavit, that it was prepared by me or under my supervision and direction, and that data and facts stated herein  
are true, correct and complete, to the best of my knowledge.

X  
\_\_\_\_\_  
Affiant's Signature

\_\_\_\_\_  
Date

[ To be sent to: Liquefied Petroleum Gas Division; Railroad Commission of Texas;  
P. O. Drawer 12967, Capitol Station; Austin, Texas 78711 ]



**RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION**

**AFFIDAVIT OF LOST OR DESTROYED LPG FORM NO. 4 DECAL**

I, \_\_\_\_\_, \_\_\_\_\_  
(Name of person completing Affidavit) (Title)

do make this affidavit saying that \_\_\_\_\_  
(Name(s) under which Licensee conducts LPG Operations)

\_\_\_\_\_ was issued an LPG Form No. 4,  
(Complete mailing address where decal is to be sent)

which is further identified as No. \_\_\_\_\_,  
(tank manufacturer & serial number(s))

for license year 19 \_\_\_\_ - 19 \_\_\_\_, and that such decal has been

(Check one)  lost or stolen and facts pertaining to the existence and location of such decal are unknown to the licensee.

destroyed, the cause of destruction being as follows: \_\_\_\_\_

\_\_\_\_\_

(State the cause of destruction. If unknown, state cause is unknown.)

THE STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I declare under penalties prescribed in §91.143, TEX. NAT. RESOURCES CODE, that I am authorized to make this affidavit, that it was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct and complete, to the best of my knowledge.

X \_\_\_\_\_  
Affiant's Signature

\_\_\_\_\_  
Date

To be sent to: Liquefied Petroleum Gas Division  
Railroad Commission of Texas  
P. O. Drawer 12967 - Capitol Station  
Austin, Texas 78711



**RAILROAD COMMISSION OF TEXAS**  
**L. P. GAS DIVISION**  
**INVENTORY OF LIQUEFIED PETROLEUM GAS SERVICE STATIONS & BOTTLE FILLING PLANTS**

Firm Name \_\_\_\_\_ L. P. Gas License No. \_\_\_\_\_

Address \_\_\_\_\_

*NOTE: Each service station and bottle filling plant must be listed separately.*

Name of Tank Manufacturer	Tank Serial Number	Water Gallon Capacity	Working Pressure	Geographical Location of Installation
Service Stations				
Bottle Filling Plants				

STATE OF TEXAS \_\_\_\_\_ )  
 COUNTY OF \_\_\_\_\_ )

I declare under penalties prescribed in §91.143, Tex. Nat. Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct, and complete, to the best of my knowledge.

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature

LPG FORM NO. 21

LICENSE SUSPENSION OR  
REVOCAION OF

LIQUEFIED PETROLEUM GAS  
DOCKET NO. \_\_\_\_\_

\_\_\_\_\_  
Name(s) of LP Gas Licensee

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City State



RESPONDENT'S ANSWER

The Respondent in this cause, being \_\_\_\_\_,  
(Name(s) of LP Gas Licensee)  
makes answer to the charges set out in the Notice of Hearing in the above-referenced Docket through its  
authorized agent, \_\_\_\_\_ whereby it  
(Name of Authorized Agent)

(Check One)

- \_\_\_\_\_ denies all charges against it and sets out its account of relevant facts on the attached sheet(s), incorporated by reference herein and made a part of this pleading for all purposes.
- \_\_\_\_\_ admits all charges against it and pleads for leniency in the assessment of penalty.
- \_\_\_\_\_ admits in part and denies in part the charged allegations and sets out its account of relevant facts on the attached sheet(s), incorporated by reference herein and made a part of this pleading for all purposes.
- \_\_\_\_\_ states on the attached sheet(s), incorporated by reference and made a part of this pleading for all purposes, the reason or reasons why the Respondent can neither admit nor deny the charges against it.

The Respondent understands that it has a right to representation through an attorney at the scheduled hearing on this Docket and further understands that a waiver of attorney prior to hearing will not operate to deny Respondent the right to legal representation should Respondent actually appear at hearing with or through legal counsel. Consequently, the Respondent

(Check One)

- \_\_\_\_\_ chooses to exercise its right to have an attorney present at the scheduled hearing and intends to appear at such hearing with or through legal counsel.
- \_\_\_\_\_ does not choose to be represented by counsel at hearing but retains the right to void this waiver of attorney by appearing at hearing with or through legal counsel.

(PLEASE COMPLETE REVERSE SIDE.)

The Respondent understands that if it does not appear in person or through an authorized representative (which may be an attorney or other agent of Respondent) that it will suffer a default judgment against it and will be subject to license suspension or revocation in this cause. At this time, the Respondent intends

(Check One)

- to appear at hearing and present its cause.
- not to appear at hearing and to suffer possible license suspension or revocation.

The Respondent

- chooses to make further statement on the attached sheet(s) incorporated by reference and made a part of this pleading for all purposes. The substance of this further statement qualifies the contents of this Answer and/or sets forth, in a concise manner, its account of relevant facts and/or its interpretation of applicable laws.
- chooses to make no further statement at this time.

\_\_\_\_\_  
RESPONDENT/LICENSEE'S NAME

By: \_\_\_\_\_  
(Name and Capacity of Subscriber)

(Reverse Side of LPG Form No. 21)

To be sent to:

**LIQUEFIED PETROLEUM GAS  
DIVISION**  
Railroad Commission of Texas  
P. O. Drawer 12967-Capitol Station  
Austin, Texas 78711

**WORKER'S COMPENSATION INCLUDING EMPLOYERS' LIABILITY  
CERTIFICATE OF INSURANCE  
FILED WITH  
LIQUEFIED PETROLEUM GAS DIVISION  
RAILROAD COMMISSION OF TEXAS  
AUSTIN, TEXAS**

THIS IS TO CERTIFY, that \_\_\_\_\_

(Name of Insurance Company)

(hereinafter called Company) of \_\_\_\_\_

(Home Office Address of Insurance Company)

\_\_\_\_\_  
(Name(s) of Liquefied Petroleum Gas Licensee)

of \_\_\_\_\_ its policy herein described

(Address of Liquefied Petroleum Gas Licensee)

covering Texas Statutory Worker's Compensation including Employers' Liability Insurance for the period herein specified.

Whenever requested by the Commission, the Company agrees to furnish to the Commission a duplicate original of said policy and all endorsements thereon.

This certificate of insurance may not be cancelled except as provided in Texas Laws, 1977, Ch. 8871, Section 12 at 2696.

Policy No. \_\_\_\_\_ Effective from \_\_\_\_\_  
and continuous until cancelled.

(12:01 a.m. standard time at the address of the named insured as stated in said policy.)

Countersigned at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

\_\_\_\_\_  
Authorized Insurance Company Representative (Signature)\*

\_\_\_\_\_  
A/C and Phone Number of Representative

\*Restricted to those names authorized by the insurance company

LPG FORM NO. 996A  
Revised 1980

RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION

AFFIDAVIT IN LIEU OF WORKER'S COMPENSATION  
including  
EMPLOYER'S LIABILITY INSURANCE

I, \_\_\_\_\_,  
(Name of Person Completing Affidavit) (Title)  
do make this affidavit saying that \_\_\_\_\_ is licensed or  
(Name(s) under which LP-Gas dealership is or will be operating)  
applying for license pursuant to §113.082 of the LP-Gas Code as a category \_\_\_\_\_ dealer, that said licensee  
(letter)  
applicant has no employee and, consequently, is filing this affidavit in lieu of a Worker's Compensation including  
Employer's Liability Insurance certificate, and, further, that the applicant or licensee will file such a certificate  
with the Liquefied Petroleum Gas Division prior to hiring any person or persons to serve as employee(s) of the  
dealership performing LP-Gas related activities.

THE STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I declare under penalties prescribed in §91.143 of the Texas Natural Resources Code that I am authorized to make this affidavit, that I have personal knowledge of the above-stated facts, that this affidavit was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct and complete to the best of my knowledge.

X

\_\_\_\_\_  
Affiant's Signature

\_\_\_\_\_  
Date

Return to: Liquefied Petroleum Gas Division; Railroad Commission of Texas;  
P. O. Drawer 12967, Capitol Station; Austin, Texas 78711

STATE OF TEXAS  
RAILROAD COMMISSION

To be sent to:

**LIQUEFIED PETROLEUM GAS  
DIVISION**  
Railroad Commission of Texas  
P. O. Drawer 12967-Capitol Station  
Austin, Texas 78711

**AUTOMOBILE BODILY INJURY AND PROPERTY DAMAGE LIABILITY  
CERTIFICATE OF INSURANCE  
FILED WITH  
LIQUEFIED PETROLEUM GAS DIVISION  
RAILROAD COMMISSION OF TEXAS  
AUSTIN, TEXAS**

THIS IS TO CERTIFY, that

\_\_\_\_\_ (Name of Insurance Company)

(hereinafter called Company) of

\_\_\_\_\_ (Home Office Address of Insurance Company)

\_\_\_\_\_ (Name(s) of Liquefied Petroleum Gas Licensee)

of \_\_\_\_\_ its policy herein described  
(Address of Liquefied Petroleum Gas Licensee)

covering Texas Automobile Bodily Injury Liability and Property Damage Liability Insurance for the period herein specified, to which is attached Standard Automobile Endorsement N. 77, Revised.

The limits of the Company's liability are as stated in the policy, but such limits shall not be less than \$100,000.00 for Bodily Injury per person, and not less than \$300,000.00 Bodily Injury per occurrence, and not less than \$100,000.00 Property Damage per occurrence; or \$300,000.00 Combined Single Limits. Whenever requested by the Commission, Company agrees to furnish to the Commission a duplicate original of said policy and all endorsements thereon.

Endorsement No. 77, Revised, which is attached to the policy may not be cancelled without cancellation of the policy to which it is attached. This certificate of insurance may not be cancelled except as provided in Texas Laws, 1977, Ch. 8871, Section 12 at 2696.

Policy No. \_\_\_\_\_ Effective from \_\_\_\_\_ and continuous until cancelled. (12:01 a.m. standard time at the address of the named insured as stated in said policy.)

Countersigned at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

\_\_\_\_\_  
Authorized Insurance Company Representative (Signature)\*

\_\_\_\_\_  
A/C and Phone Number of Representative  
\*Restricted to those names authorized by the insurance company

LPG FORM NO. 997A  
Revised 1980



**RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION**

**AFFIDAVIT IN LIEU OF AUTOMOBILE BODILY INJURY  
AND  
PROPERTY DAMAGE LIABILITY INSURANCE**

I, \_\_\_\_\_, \_\_\_\_\_,  
(Name of Person Completing Affidavit) (Title)  
do make this affidavit saying that \_\_\_\_\_ is licensed or  
(Name(s) under which LP-Gas dealership is or will be operating)  
applying for license pursuant to Section 113.082 of the LP-Gas Code as a category \_\_\_\_\_ dealer, that said ap-  
(letter)  
plicant or dealer does not operate a motor vehicle equipped with an LP-Gas cargo tank or tanks or transport LP Gas  
in any manner by vehicle and, consequently, is filing this affidavit in lieu of a certificate of Automobile Bodily  
Injury and Property Damage Liability Insurance, and further, that the applicant or licensee will file such a certifi-  
cate with the Liquefied Petroleum Gas Division prior to the delivery or transport of LP-Gas by motor vehicle.

THE STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I declare under penalties prescribed in §91.143 of the Texas Natural Resources Code that I am authorized to make this affidavit, that I have personal knowledge of the above-stated facts, that this affidavit was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct and complete to the best of my knowledge.

X

\_\_\_\_\_  
Affiant's Signature

\_\_\_\_\_  
Date

Return to: Liquefied Petroleum Gas Division; Railroad Commission of Texas;  
P. O. Drawer 12967, Capitol Station; Austin, Texas 78711

To be sent to:

**LIQUEFIED PETROLEUM GAS  
DIVISION**  
Railroad Commission of Texas  
P. O. Drawer 12967-Capitol Station  
Austin, Texas 78711

**GENERAL LIABILITY  
CERTIFICATE OF INSURANCE  
FILED WITH  
LIQUEFIED PETROLEUM GAS DIVISION  
RAILROAD COMMISSION OF TEXAS  
AUSTIN, TEXAS**

THIS IS TO CERTIFY, that \_\_\_\_\_

(Name of Insurance Company)

(hereinafter called Company) of \_\_\_\_\_

(Home Office Address of Insurance Company)

\_\_\_\_\_ (Name(s) of Liquefied Petroleum Gas Licensee)

of \_\_\_\_\_

(Address of Liquefied Petroleum Gas Licensee)

its policy herein described

covering a General Liability Policy, including Premises & Operations Coverage.

Check the type of coverage:

- The limits of the company's liability are as stated in the policy, but such limits shall not be less than \$25,000 Bodily Injury; \$10,000 Property Damage, \$25,000 Aggregate; or \$25,000 Combined Single Limits.
- The limits of the company's liability are as stated in the policy, but such limits shall not be less than \$50,000 Bodily Injury; \$25,000 Property Damage, \$50,000 Aggregate; or \$50,000 Combined Single Limits.
- The limits of the company's liability are as stated in the policy, but such limits shall not be less than \$300,000 Bodily Injury; \$100,000 Property Damage; \$300,000 Aggregate; or \$300,000 Combined Single Limits.
- The limits of the company's liability are as stated in the policy, but such limits shall not be less than \$300,000 Bodily Injury; \$100,000 Property Damage, \$300,000 Aggregate; or \$300,000 Combined Single Limits, including Completed Operations and Products Liability Coverage.

Whenever requested by the Commission, the Company agrees to furnish to the Commission a duplicate original of said policy and all endorsements thereon.

This certificate of insurance may not be cancelled except as provided in Texas Laws, 1977, Ch. 8871, Section 12 at 2696.

Policy No. \_\_\_\_\_ Effective from \_\_\_\_\_  
and continuous until cancelled. (12:01 a.m. standard time at the address of the named insured as stated in said policy.)

Countersigned at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

\_\_\_\_\_  
Authorized Insurance Company Representative (Signature)\*

\_\_\_\_\_  
A/C and Phone Number of Representative

\*Restricted to those names authorized by the insurance company

LPG FORM NO. 998A  
Revised 1980



**RAILROAD COMMISSION OF TEXAS  
LIQUEFIED PETROLEUM GAS DIVISION**

**NOTICE OF INSURANCE CANCELLATION**

Notice is hereby given to the Railroad Commission of Texas, Liquefied Petroleum Gas Division, of the cancellation of a policy of insurance described as follows:

INSURED \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

REASON OF CANCELLATION \_\_\_\_\_

TYPE OF INSURANCE \_\_\_\_\_ POLICY NUMBER \_\_\_\_\_

DATE EFFECTIVE \_\_\_\_\_, 19 \_\_\_\_\_ HOUR EFFECTIVE \_\_\_\_\_

DATE OF CANCELLATION \_\_\_\_\_, 19 \_\_\_\_\_ HOUR OF CANCELLATION \_\_\_\_\_

NAME OF INSURANCE COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_  
INSURANCE COMPANY

BY \_\_\_\_\_  
Authorized Insurance Company Representative

\_\_\_\_\_  
A/C and Phone Number of Company Representative

Dated: \_\_\_\_\_, 19 \_\_\_\_\_

Return to: Liquefied Petroleum Gas Division; Railroad Commission of Texas;  
P. O. Drawer 12967, Capitol Station; Austin, Texas 78711



