

TITLE 16. ECONOMIC REGULATION
PART 1. RAILROAD COMMISSION OF TEXAS
CHAPTER 13. REGULATIONS FOR
COMPRESSED NATURAL GAS (CNG)
SUBCHAPTER A. SCOPE AND DEFINITIONS

§13.1. Scope.

(a) This chapter applies to the design and installation of compressed natural gas (CNG) engine fuel systems on vehicles of all types; CNG systems used for compression, storage, sale, transportation, delivery, or distribution of CNG for any purpose; and all CNG mobile fuel systems.

(b) This chapter shall not apply to:

(1) the production, transportation, storage, sale, or distribution of natural gas that is subject to Commission jurisdiction under Subtitle A or B, Title 3, Texas Utilities Code;

(2) pipelines, fixtures, equipment, or facilities to the extent that they are subject to the safety regulations promulgated and enforced by the Railroad Commission of Texas pursuant to Natural Resources Code, Chapter 117, or Subchapter E, Chapter 121, Texas Utilities Code; or

(3) the design and installation of any CNG system in ships, barges, sailboats, or other types of watercraft. Such installation is subject to the American Board and Yacht Council (ABYC) and any other applicable standards.

(c) Subchapters A, B, C, D, E, and F of this chapter shall not apply to vehicles and fuel supply containers that:

(1) are manufactured or installed by original equipment manufacturers;

(2) comply with Title 49, Code of Federal Regulations, the Federal Motor Vehicle Safety Standards; and

(3) comply with the National Fire Protection Association (NFPA) Code 52, *Compressed Natural Gas (CNG) Vehicular Systems Code*.

(d) Vehicles and fuel supply containers excluded from the requirements of subchapters A through F of this chapter pursuant to subsection (c) of this section shall comply with the requirements of §13.24 of this title, relating to Filings Required for School Bus, Mass Transit, and Special Transit Installations.

The provisions of this §13.1 adopted to be effective November 15, 1990, 15 TexReg 5934; amended to be effective June 1, 1994, 19 TexReg 3168; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective July 28, 2003, 28 TexReg 5870.

§13.2. Retroactivity. Unless otherwise stated, the regulations in this chapter are not retroactive. Any installation of a CNG system shall meet the requirements of this chapter at the time of installation.

The provisions of this §13.2 adopted to be effective November 15, 1990, 15 TexReg 5934; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604.

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

(1) AED--The Commission's Alternative Energy Division.

(2) AFRED--The organizational unit of the AED that administers the Commission's alternative fuels research and education program, including CNG certification, exempt registration, and training.

(3) ANSI--American National Standards Institute.

(4) ASME--American Society of Mechanical Engineers.

(5) ASME Code--ASME Boiler and Pressure Vessel Code.

(6) ASTM--ASTM International (formerly American Society for Testing and Materials).

(7) Automatic dispenser--A CNG dispenser which is operated by a member of the general public and which requires transaction authorization.

(8) Building--A structure with walls and a roof resulting in the structure being totally enclosed.

(9) Cascade storage system--Storage in multiple cylinders.

(10) CNG--See "Compressed natural gas" in this section.

(11) CNG cargo tank--A container which complies with ASME or DOT specifications used to transport CNG for delivery.

(12) CNG cylinder--A cylinder or other container designed for use or used as part of a CNG system.

(13) CNG system--A system of safety devices, cylinders, piping, fittings, valves, compressors, regulators, gauges, relief devices, vents, installation fixtures, and other CNG equipment intended for use or used in any building or commercial installation, or used in conjunction with a motor vehicle or mobile fuel system fueled by CNG, or any system or facilities designed to be used or used in the compression, sale, storage, transportation for delivery, or distribution of CNG in portable CNG cylinders, not including natural gas facilities, equipment, or pipelines located upstream of the inlet of a compressor devoted entirely to CNG.

(14) Commercial installation--Any CNG installation located on premises other than a single family dwelling used as a residence, including but not limited to a retail business establishment, school,

convalescent home, hospital, retail CNG cylinder filling/exchange operation, service station, forklift refueling facility, or private motor/mobile fuel cylinder filling operation.

(15) Commission--The Railroad Commission of Texas.

(16) Company representative--An owner or employee of a licensee designated by that licensee to take any required examinations and to actively supervise CNG operations of the licensee.

(17) Compressed natural gas--Natural gas which is a mixture of hydrocarbon gases and vapors consisting principally of methane (CH₄) in gaseous form that is compressed and used, stored, sold, transported, or distributed for use by or through a CNG system.

(18) Container--A pressure vessel cylinder or cylinders permanently manifolded together used to store CNG.

(19) Cylinder service valve--A hand-wheel operated valve connected directly to a CNG cylinder.

(20) Director--The director of the AED or the director's delegate.

(21) Dispensing area or dispensing installation--A CNG installation that dispenses CNG from any source by any means into fuel supply cylinders installed on vehicles or into portable cylinders.

(22) DOT--United States Department of Transportation.

(23) Flexible metal hose--Metal hose made from continuous tubing that is corrugated for flexibility and, if used for pressurized applications, has an external wire braid.

(24) Fuel supply cylinder--A cylinder mounted upon a vehicle for storage of CNG as fuel supply to an internal combustion engine.

(25) Interim approval order--The authority issued by the Railroad Commission of Texas following a public hearing allowing construction of a CNG installation.

(26) Location--A site operated by a CNG licensee at which the licensee carries on an essential element of its CNG activities, but where the activities of the site alone do not qualify the site as an outlet.

(27) LP-Gas Operations--The organizational unit of the AED that administers the CNG safety program, including licensing, truck registration, installation approvals, complaint and accident investigations, inspections of stationary installations and vehicles, and code enforcement.

(28) Manifold--The assembly of piping and fittings used to connect cylinders.

(29) Mass transit vehicle--Any vehicle which is owned or operated by a political subdivision of a

state, city, or county and primarily used in the conveyance of the general public.

(30) Metallic hose--Hose in which the strength of the hose depends primarily on the strength of metallic parts, including liners or covers.

(31) Mobile fuel container--A CNG container mounted on a vehicle to store CNG as the fuel supply for uses other than motor fuel.

(32) Mobile fuel system--A CNG system which supplies natural gas fuel to an auxiliary engine other than the engine used to propel the vehicle or for other uses on the vehicle.

(33) Motor fuel container--A CNG container mounted on a vehicle to store CNG as the fuel supply to an engine used to propel the vehicle.

(34) Motor fuel system--A CNG system excluding the container which supplies CNG to an engine used to propel the vehicle.

(35) Motor vehicle--A self-propelled vehicle licensed for highway use or used on a public highway.

(36) Outlet--A site operated by a CNG licensee at which the business conducted materially duplicates the operations for which the licensee is initially granted a license.

(37) Person--An individual, sole proprietor, partnership, firm, joint venture, association, corporation, or any other business entity, a state agency or institution, county, municipality, school district, or other governmental subdivision, or licensee.

(38) Point of transfer--The point where the fueling connection is made.

(39) Pressure-filled--A method of transferring CNG into cylinders by using pressure differential.

(40) Pressure relief valve--A device designed to prevent rupture of a normally charged cylinder.

(41) Public transportation vehicle--A vehicle for hire to transport persons, including but not limited to taxis, buses (excluding school buses, mass transit, or special transit vehicles), or airport courtesy cars.

(42) Pullaway--The accidental separation of a hose from a cylinder, container, transfer equipment, or dispensing equipment, which could occur on a cylinder, container, transfer equipment, or dispensing equipment whether or not they are protected by a pullaway device.

(43) Representative--The individual designated by an applicant or licensee as the principal individual in authority who is responsible for actively supervising the licensee's CNG activities.

(44) Residential fueling facility--An assembly and its associated equipment and piping at a residence used for the compression and delivery of natural gas into vehicles.

(45) School--A public or private institution which has been accredited through the Texas

Education Agency or the Texas Private School Accreditation Commission.

(46) School bus--A vehicle that is sold or used for purposes that include carrying students to and from school or related events.

(47) Settled pressure--The pressure in a container at 70 degrees Fahrenheit, which cannot exceed the marked service or design pressure of the cylinder.

(48) Special transit vehicle--A vehicle designed with limited passenger capacity which is used by a school or mass transit authority for special transit purposes, such as transport of mobility impaired persons.

(49) Transport--Any vehicle or combination of vehicles and CNG cylinders designed or adapted for use or used principally as a means of moving or delivering CNG from one place to another, including

but not limited to any truck, trailer, semitrailer, cargo tank, or other vehicle used in the distribution of CNG.

(50) Ultimate consumer--The person controlling CNG immediately prior to its ignition.

The provisions of this §13.3 adopted to be effective November 15, 1990, 15 TexReg 5934; amended to be effective October 15, 1993, 18 TexReg 6455; amended to be effective June 1, 1994, 19 TexReg 3168; amended to be effective August 22, 1995, 20 TexReg 6017; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.4. CNG Forms. Under the provisions of the Texas Natural Resources Code, Chapter 116, the Railroad Commission of Texas has designated the following forms for use:

Railroad Commission of Texas CNG Forms

Form Number	Form Title	Creation or Last Revision Date	Applicable Rule Number (16 TAC §____) or Other Authority
CNG Form 1001	Application for CNG License or License Renewal	Rev. 7/2012	13.61(j)
CNG Form 1001A	Branch Outlet List	Rev. 7/2012	13.72(b)
CNG Form 1003	Compressed Natural Gas License	n/a	13.61
CNG Form 1004	Compressed Natural Gas Vehicle Identification	n/a	13.69(c)
CNG Form 1007	Truck Registration/Re-registration/Transfer	Rev. 7/2012	13.68(b); 13.69(a)
CNG Form 1008	Manufacturer's Report of Retest or Repair	Rev. 7/2012	13.141(d)
CNG Form 1016	Application for Examination	Rev. 7/2012	13.70(a)(3); 13.70(c)(1)(B)
CNG Form 1016A	Certified Employee Transfer Form	Rev. 7/2012	13.73
CNG Form 1016B	Application for Registration by a Master or Journeyman Plumber or a Class A or B Air Conditioning & Refrigeration Contractor	Rev. 7/2012	13.70(b)(1)
CNG Form 1018	Affidavit of Lost or Destroyed License	Rev. 7/2012	n/a
CNG Form 1018B	Statement of Lost or Destroyed CNG Form 1004 Decal	Rev. 7/2012	13.69(c)(5)
CNG Form 1019	Transfer of CNG Storage Cylinders/Containers	Rev. 7/2012	n/a
CNG Form 1020	Report of CNG Incident/Accident	Rev. 7/2012	13.36(d)
CNG Form 1025	Application and Notice of Exception to the Regulations for Compressed Natural Gas	Rev. 7/2012	13.35(a)
CNG Form 1027	Application for Qualification as Self-Insurer General Liability	Rev. 7/2012	13.63(b)
CNG Form 1028	Notice of Election to Self-Insure	Rev. 7/2012	13.64
CNG Form 1500	Application to Install CNG Facility (Aggregate Storage Capacity Greater than 240 Standard Cubic Feet Water Volume)	Rev. 7/2012	13.25(b)(1)

CNG Form 1501	Completion Report for CNG Commercial Installations of 240 Standard Cubic Feet Water Volume or Less	Rev. 7/2012	13.25(f)(1)
CNG Form 1503	Notice of Completed Installation of a CNG System on School Bus, Public Transportation, Mass Transit, or Special Transit Vehicle(s)	Rev. 7/2012	13.24(a)
CNG Form 1505	Testing Procedures Certification	Rev. 7/2012	13.61(k)(2)
CNG Form 1995	Certification of Political Subdivision of Self-Insurance for Workers' Compensation, General Liability, and/or Motor Vehicle Liability Insurance	Rev. 7/2012	13.63(g)
CNG Form 1996B	Statement in Lieu of Insurance Filing Certifying Workers' Compensation Coverage, including Employer's Liability Coverage or Alternative Accident/Health Insurance	Rev. 7/2012	Table 13.62; 13.62(d)(3)
CNG Form 1997B	Statement in Lieu of Motor Vehicle Bodily Injury Insurance and Property Damage Liability Insurance	Rev. 7/2012	Table 13.62; 13.62(d)(1)
CNG Form 1998B	Statement in Lieu of General Liability Insurance and/or Completed Operations or Products Liability Insurance	Rev. 7/2012	Table 13.62; 13.62(d)(2); 13.62(d)(4)
CNG Form 1999	Notice of Insurance Cancellation	Rev. 7/2012	13.62(g)

The provisions of this §13.4 adopted to be effective November 15, 1990, 15 TexReg 5934; amended to be effective October 15, 1993, 18 TexReg 6455; amended to be effective June 1, 1994, 19 TexReg 3168; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.15. Penalty Guidelines for CNG Safety Violations.

(a) Policy. Improved safety and environmental protection are the desired outcomes of any enforcement action. Encouraging licensees and certificate holders to take appropriate voluntary corrective and future protective actions once a violation has occurred is an effective component of the enforcement process. Deterrence of violations through penalty assessments is also a necessary and effective component of the enforcement process. A rule-based enforcement penalty guideline to evaluate and rank CNG-related violations is consistent with the central goal of the Commission's enforcement efforts to promote compliance. Penalty guidelines set forth in this section will provide a framework for more uniform and equitable assessment of penalties throughout the state, while also enhancing the integrity of the Commission's enforcement program.

(b) Only guidelines. This section complies with the requirements of Texas Natural Resources Code, §81.0531. The penalty amounts contained in the tables

in this section are provided solely as guidelines to be considered by the Commission in determining the amount of administrative penalties for violations of provisions of Texas Natural Resources Code, Title 3, Chapter 116, relating to compressed natural gas; of rules, orders, licenses, permits, or certificates relating to CNG safety adopted under those provisions; and of regulations, codes, or standards that the Commission has adopted by reference.

(c) Commission authority. The establishment of these penalty guidelines shall in no way limit the Commission's authority and discretion to assess administrative penalties. The typical minimum penalties listed in this section are for the most common violations cited; however, this is neither an exclusive nor an exhaustive list of violations that the Commission may cite. The Commission retains full authority and discretion to cite violations of Texas Natural Resources Code, Title 3, Chapter 116, relating to compressed natural gas; of rules, orders, licenses, permits, or certificates relating to CNG safety adopted or issued under those provisions; and of regulations, codes, or standards that the Commission has adopted by reference, and to assess administrative penalties in any amount up to the statutory maximum when warranted by the facts in any case.

(d) Factors considered. The amount of any penalty requested, recommended, or finally assessed in an enforcement action will be determined on an individual

case-by-case basis for each violation, taking into consideration the following factors:

- (1) the person's history of previous violations;
- (2) the seriousness of the previous violations;
- (3) any hazard to the health or safety of the public; and
- (4) the demonstrated good faith of the person charged.

(e) Typical penalties. Regardless of the method by which the typical penalty amount is calculated, the

total penalty amount will be within the statutory maximum. Typical penalties for violations of provisions of Texas Natural Resources Code, Title 3, Chapter 116, relating to compressed natural gas; of rules, orders, licenses, permits, or certificates relating to CNG safety adopted under those provisions; and of regulations, codes, or standards that the Commission has adopted by reference, are set forth in Table 1.

Table 1. CNG Penalty Schedule Guidelines

CNG Rule/Statute	General Description	Typical Minimum Penalty Amount/Range
Tex. Nat. Res. Code, Chapter 116	Any violation of Chapter 116, Texas Natural Resources Code	\$1,000-2,500
16 TAC §13.22	Odorization	\$1,000-2,500
16 TAC §13.24	Filing required for school and transit vehicles	\$100-500
16 TAC §13.25	Filings for stationary installations Form 1501: 1-5 occurrences	\$100
16 TAC §13.25	Filings for stationary installations Form 1501: 6-10 occurrences	\$200
16 TAC §13.25	Filings for stationary installations Form 1501: >10 occurrences	\$500
16 TAC §13.25	Filings for stationary installations Form 1500	\$1,000
16 TAC §13.26	Construction of cylinders and pressure vessels	\$1,000
16 TAC §13.27	Pressure relief devices	\$1,000
16 TAC §13.28	Pressure gauges	\$250
16 TAC §13.29	Pressure regulators	\$500-1,000
16 TAC §13.30	Piping	\$500-1,000
16 TAC §13.31	Valves	\$500-1,000
16 TAC §13.32	Hose and hose connections	\$500-1,000
16 TAC §13.33	Compression equipment	\$500-1,500
16 TAC §13.34	Vehicle fuel connection	\$500
16 TAC §13.36	CNG incident/accident report	\$1,000
16 TAC §13.38	Removal from CNG service	\$1,000-2,500
16 TAC §13.39	Filing unapproved cylinders	\$500-1,500
16 TAC §13.40	Manufacturer's nameplates and ASME markings	\$1,000
16 TAC §13.61	License and related fees; lapse 1-2 months	\$500
16 TAC §13.61	License and related fees; lapse 3-4 months	\$750
16 TAC §13.61	License and related fees; lapse 5-6 months	\$1,000
16 TAC §13.61	License and related fees; lapse >6 months	\$1,000-2,500
16 TAC §13.62	Insurance requirements	\$1,000
16 TAC §13.67	Change in ownership	\$250
16 TAC §13.68	Dealership name change	\$250
16 TAC §13.69	Registration and transfer of transports	\$500-1,500
16 TAC §13.70	Examination requirements and renewals	\$250
16 TAC §13.72	Operations supervisor	\$500
16 TAC §13.73	Employee transfers	\$100
16 TAC §13.93	General requirements	\$100-750
16 TAC §13.94	Locations of installations	\$500-1,000
16 TAC §13.95	Installation of cylinders and appurtenances	\$100-750
16 TAC §13.96	Installation of pressure relief devices	\$1,000

16 TAC §13.97	Installation of pressure regulators	\$500-1,000
16 TAC §13.98	Installation of pressure gauges	\$250-1,000
16 TAC §13.99	Installation of piping and hoses	\$250-1,000
16 TAC §13.100	Testing	\$1,000
16 TAC §13.101	Emergency shutdown equipment	\$1,000
16 TAC §13.102	Electrical equipment	\$100-500
16 TAC §13.103	Stray or impressed currents and bonding	\$100-500
16 TAC §13.104	Operations	\$500-1,500
16 TAC §13.105	Fire protection	\$100-250
16 TAC §13.106	Maintenance	\$250-1,000
16 TAC §13.107	Dispenser accuracy	\$250
16 TAC §13.132	System component qualification	\$500
16 TAC §13.133	Installation of fuel supply cylinders	\$250-1,500
16 TAC §13.134	Installation of venting systems	\$250
16 TAC §13.135	Installation of piping	\$250-500
16 TAC §13.136	Installation of valves	\$250-500
16 TAC §13.137	Installation of pressure gauges	\$100-500
16 TAC §13.138	Installation of pressure regulators	\$500-1,000
16 TAC §13.139	Installation of fueling connection	\$500
16 TAC §13.140	Labeling	\$100
16 TAC §13.141	System testing	\$1,000
16 TAC §13.142	Maintenance and repair	\$250-1,000
16 TAC §13.143	Venting of CNG to atmosphere	\$250-750
16 TAC §13.184	General requirements	\$750
16 TAC §13.185	Installation	\$500-1,000
16 TAC §13.186	Outdoor installations	\$250
16 TAC §13.187	Installation of pressure relief valves	\$100-500
16 TAC §13.189	Pressure regulation	\$250-750
16 TAC §13.190	Piping and hose	\$250-1,000
16 TAC §13.191	Testing	\$1,000
16 TAC §13.192	Installation of emergency shutdown equipment	\$250-1,000
16 TAC §13.193	Operation	\$500-1,000
16 TAC §13.194	Maintenance and inspection	\$250-1,000

(f) Penalty enhancements for certain violations. For violations that involve threatened or actual safety hazards, or that result from the reckless or intentional conduct of the person charged, the Commission may

assess an enhancement of the typical penalty. The enhancement may be in any amount in the range shown for each type of violation, as shown in Table 2.

Table 2. CNG Penalty Enhancements

For violations that involve:	Threatened or actual safety hazard	Severity of violation or culpability of person charged
Death or personal injury	\$5,000 to \$20,000	
Taking facility out of service	\$1,000 to \$5,000	
Gas ignition or release requiring emergency response	\$1,000 to \$15,000	
Damage to CNG installation or vehicle	\$1,000 to \$5,000	
Property damage exceeding \$5,000	\$1,000 to \$15,000	
Rerouting of traffic or evacuation of premises	\$1,000 to \$5,000	
Time out of compliance		\$100 to \$2,000 for each month
Reckless conduct of person charged		Up to double the total penalty
Intentional conduct of person charged		Up to triple the total penalty

(g) Penalty enhancements for certain violators. For violations in which the person charged has a history of prior violations within seven years of the current enforcement action, the Commission may assess an enhancement based on either the number of prior violations or the total amount of previous administrative penalties, but not both. The actual amount of any penalty enhancement will be determined on an individual case-by-case basis for each violation. The guidelines in Tables 3 and 4 are intended to be used separately. Either guideline may be used where applicable, but not both.

Table 3. Penalty enhancements based on number of prior violations within seven years

Number of violations in the seven years prior to action	Enhancement amount
One	\$1,000
Two	\$2,000
Three	\$3,000
Four	\$4,000
Five or more	\$5,000

Table 4. Penalty enhancements based on total amount of prior penalties within seven years

Total administrative penalties assessed in the seven years prior to action	Enhancement amount
Less than \$10,000	\$1,000
Between \$10,000 and \$25,000	\$2,500
Between \$25,000 and \$50,000	\$5,000
Between \$50,000 and \$100,000	\$10,000
Over \$100,000	10% of total amount

(h) Penalty reduction for settlement before hearing. The recommended monetary penalty for a violation may be reduced by up to 50% if the person charged agrees to a settlement before the Commission conducts an administrative hearing to prosecute a violation. Once the hearing is convened, the opportunity for the person charged to reduce the basic monetary penalty is no longer available. The reduction applies to the basic penalty amount requested and not to any requested enhancements.

(i) Demonstrated good faith. In determining the total amount of any monetary penalty requested, recommended, or finally assessed in an enforcement action, the Commission may consider, on an individual case-by-case basis for each violation, the demonstrated good faith of the person charged. Demonstrated good faith includes, but is not limited to, actions taken by the person charged before the filing of an enforcement action to remedy, in whole or in part, a violation or to mitigate the consequences of a violation.

(j) Other sanctions. Depending upon the nature of and the consequences resulting from a violation of the rules in this chapter, the Commission may impose a non-monetary penalty, such as requiring attendance at a safety training course, or may issue a warning.

(k) Penalty calculation worksheet. The penalty calculation worksheet shown in Table 5 lists the typical penalty amounts for certain violations; the circumstances justifying enhancements of a penalty and the amount of the enhancement; and the circumstances justifying a reduction in a penalty and the amount of the reduction.

Table 5. CNG Penalty Worksheet

	CNG Rule/Statute	General Description	Typical Minimum Penalty Amount/Range	Penalty Tally
1	Tex. Nat. Res. Code, Chapter 116	Any violation of Chapter 116, Texas Natural Resources Code	\$1,000-2,500	\$
2	16 TAC §13.22	Odorization	\$1,000-2,500	\$
3	16 TAC §13.24	Filing required for school and transit vehicles	\$100-500	\$
4	16 TAC §13.25	Filings for stationary installations Form 1501: 1-5 occurrences	\$100	\$
5	16 TAC §13.25	Filings for stationary installations Form 1501: 6-10 occurrences	\$200	\$
6	16 TAC §13.25	Filings for stationary installations Form 1501: >10 occurrences	\$500	\$
7	16 TAC §13.25	Filings for stationary installations Form 1500	\$1,000	\$
8	16 TAC §13.26	Construction of cylinders and pressure vessels	\$1,000	\$

9	16 TAC §13.27	Pressure relief devices	\$1,000	\$
10	16 TAC §13.28	Pressure gauges	\$250	\$
11	16 TAC §13.29	Pressure regulators	\$500-1,000	\$
12	16 TAC §13.30	Piping	\$500-1,000	\$
13	16 TAC §13.31	Valves	\$500-1,000	\$
14	16 TAC §13.32	Hose and hose connections	\$500-1,000	\$
15	16 TAC §13.33	Compression equipment	\$500-1,500	\$
16	16 TAC §13.34	Vehicle fuel connection	\$500	\$
17	16 TAC §13.36	CNG incident/accident report	\$1,000	\$
18	16 TAC §13.38	Removal from CNG service	\$1,000-2,500	\$
19	16 TAC §13.39	Filing unapproved cylinders	\$500-1,500	\$
20	16 TAC §13.40	Manufacturer's nameplates and ASME markings	\$1,000	\$
21	16 TAC §13.61	License and related fees; lapse 1-2 months	\$500	\$
22	16 TAC §13.61	License and related fees; lapse 3-4 months	\$750	\$
23	16 TAC §13.61	License and related fees; lapse 5-6 months	\$1,000	\$
24	16 TAC §13.61	License and related fees; lapse more than 6 months	\$1,000-2,500	\$
25	16 TAC §13.62	Insurance requirements	\$1,000	\$
26	16 TAC §13.67	Change in ownership	\$250	\$
27	16 TAC §13.68	Dealership name change	\$250	\$
28	16 TAC §13.69	Registration and transfer of transports	\$500-1,500	\$
29	16 TAC §13.70	Examination requirements and renewals	\$250	\$
30	16 TAC §13.72	Operations supervisor	\$500	\$
31	16 TAC §13.73	Employee transfers	\$100	\$
32	16 TAC §13.93	General requirements	\$100-750	\$
33	16 TAC §13.94	Locations of installations	\$500-1,000	\$
34	16 TAC §13.95	Installation of cylinders and appurtenances	\$100-750	\$
35	16 TAC §13.96	Installation of pressure relief devices	\$1,000	\$
36	16 TAC §13.97	Installation of pressure regulators	\$500-1,000	\$
37	16 TAC §13.98	Installation of pressure gauges	\$250-1,000	\$
38	16 TAC §13.99	Installation of piping and hoses	\$250-1,000	\$
39	16 TAC §13.100	Testing	\$1,000	\$
40	16 TAC §13.101	Emergency shutdown equipment	\$1,000	\$
41	16 TAC §13.102	Electrical equipment	\$100-500	\$
42	16 TAC §13.103	Stray or impressed currents and bonding	\$100-500	\$
43	16 TAC §13.104	Operations	\$500-1,500	\$
44	16 TAC §13.105	Fire protection	\$100-250	\$
45	16 TAC §13.106	Maintenance	\$250-1,000	\$
46	16 TAC §13.107	Dispenser accuracy	\$250	\$
47	16 TAC §13.132	System component qualification	\$500	\$
48	16 TAC §13.133	Installation of fuel supply cylinders	\$250-1,500	\$
49	16 TAC §13.134	Installation of venting systems	\$250	\$
50	16 TAC §13.135	Installation of piping	\$250-500	\$
51	16 TAC §13.136	Installation of valves	\$250-500	\$
52	16 TAC §13.137	Installation of pressure gauges	\$100-500	\$
53	16 TAC §13.138	Installation of pressure regulators	\$500-1,000	\$
54	16 TAC §13.139	Installation of fueling connection	\$500	\$
55	16 TAC §13.140	Labeling	\$100	\$
56	16 TAC §13.141	System testing	\$1,000	\$
57	16 TAC §13.142	Maintenance and repair	\$250-1,000	\$
58	16 TAC §13.143	Venting of CNG to atmosphere	\$250-750	\$

59	16 TAC §13.184	General requirements	\$750	\$
60	16 TAC §13.185	Installation	\$500-1,000	\$
61	16 TAC §13.186	Outdoor installations	\$250	\$
62	16 TAC §13.187	Installation of pressure relief valves	\$100-500	\$
63	16 TAC §13.189	Pressure regulation	\$250-750	\$
64	16 TAC §13.190	Piping and hose	\$250-1,000	\$
65	16 TAC §13.191	Testing	\$1,000	\$
66	16 TAC §13.192	Installation of emergency shutdown equipment	\$250-1,000	\$
67	16 TAC §13.193	Operation	\$500-1,000	\$
68	16 TAC §13.194	Maintenance and inspection	\$250-1,000	\$
69	Subtotal of typical penalty amounts from Table 1 (lines 1-68, inclusive)			\$
70	Reduction for settlement before hearing: up to 50% of line 69 amt.		_____%	\$
71	Subtotal: amount shown on line 69 less applicable settlement reduction on line 70			\$

Penalty enhancement amounts for threatened or actual safety hazard from Table 2

72	Death or personal injury	\$5,000-20,000	\$
73	Taking facility out of service	\$1,000-5,000	\$
74	Gas ignition or release requiring emergency response	\$1,000-15,000	\$
75	Damage to CNG installation or vehicle	\$1,000-5,000	\$
76	Property damage exceeding \$5,000	\$1,000-15,000	\$
77	Rerouting of traffic or evacuation of premises	\$1,000-5,000	\$

Penalty enhancement for severity of violation from Table 2

78	Time out of compliance	\$100-\$2,000/mo.	\$	
79	Subtotal: amount shown on line 71 plus all amounts on lines 72-78, inclusive			\$

Penalty enhancements for culpability of person charged from Table 2

80	Reckless conduct of person charged	Up to double line 79	\$
81	Intentional conduct of person charged	Up to triple line 79	\$

Penalty enhancements for number of prior violations within past seven years from Table 3

82	One	\$1,000	\$
83	Two	\$2,000	\$
84	Three	\$3,000	\$
85	Four	\$4,000	\$
86	Five or more	\$5,000	\$

Penalty enhancements for amount of penalties within past seven years from Table 4

87	Less than \$10,000	\$1,000	\$	
88	Between \$10,000 and \$25,000	\$2,500	\$	
89	Between \$25,000 and \$50,000	\$5,000	\$	
90	Between \$50,000 and \$100,000	\$10,000	\$	
91	Over \$100,000	10% of total amt.	\$	
92	Subtotal: Line 79 amt. plus amt. on line 80 and/or 81 plus the amt. shown on any line from 82-91, inclusive			\$
93	Reduction for demonstrated good faith of person charged			\$
94	TOTAL PENALTY AMOUNT: amount on line 92 less any amount shown on line 93			\$

The provisions of this §13.15 adopted to be effective August 27, 2012, 37 TexReg 6570.

SUBCHAPTER B. GENERAL RULES FOR COMPRESSED NATURAL GAS (CNG) EQUIPMENT QUALIFICATIONS
 §13.21. *Applicability and Severability.*

(a) The provisions of this subchapter apply to pressurized components of a compressed natural gas (CNG) system, and are applicable to both engine fuel systems and compression, storage, and dispensing systems.

(b) If any item, clause, or provision of these rules is for any reason declared invalid, the remainder of the

provisions shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

(c) Nothing in these rules shall be construed as requiring, allowing, or approving the unlicensed practice of engineering or any other professional occupation requiring licensure.

The provisions of this §13.21 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 7157.

§13.22. Odorization.

(a) Compressed natural gas shall have a distinctive odor potent enough for its presence to be detected down to a concentration in air of not over one-fifth of the lower limit of flammability.

(b) Compressed natural gas shall be odorized according to the provisions of Texas Utilities Code, §§121.251 and 121.252, in effect at the time the gas is odorized.

The provisions of this §13.22 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 22, 2001, 26 TexReg 8342.

§13.24. Filings Required for School Bus, Mass Transit, and Special Transit Installations.

(a) After the manufacture of or the conversion to a CNG system on any vehicle to be used as a school bus, mass transit, public transportation, or special transit vehicle, the manufacturer, licensee, or ultimate consumer making the installation or conversion shall notify LP-Gas Operations in writing on CNG Form 1503 that the applicable CNG-powered vehicles are ready for a complete inspection to determine compliance with the rules in this chapter.

(b) If LP-Gas Operations' initial complete inspection finds the vehicle in compliance with the rules in this chapter and the statutes, the vehicle may be placed into CNG service. For fleet installations of identical design, an initial inspection shall be conducted prior to the operation of the first vehicle, and subsequent vehicles of the same design may be placed into service without prior inspections. Subsequent inspections shall be conducted within a reasonable time frame to ensure the vehicles are operating in compliance with the rules in this chapter. If violations exist at the time of the initial complete inspection, the vehicle shall not be placed into CNG service and the manufacturer, licensee, or ultimate consumer making the installation or conversion shall correct the violations. The manufacturer, licensee, or ultimate consumer shall file with LP-Gas Operations documentation demonstrating compliance with the rules in this chapter, or LP-Gas Operations shall

conduct another complete inspection before the vehicle may be placed into CNG service.

(c) The manufacturer, licensee, or ultimate consumer making the installation or conversion shall be responsible for compliance with the rules in this chapter, statutes, and any other local, state, or federal requirements.

(d) If the requested LP-Gas Operations inspection identifies violations requiring modifications by the manufacturer, licensee, or ultimate consumer, LP-Gas Operations shall consider the assessment of an inspection fee to cover the costs associated with any additional inspection, including mileage and per diem rates set by the legislature.

The provisions of this §13.24 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.25. Filings Required for Stationary CNG Installations.

(a) No CNG container shall be placed into CNG service or an installation operated or used in CNG service until the requirements of this section, as applicable, are met and the facility is in compliance with the rules in this chapter and all applicable statutes, in addition to any applicable requirements of the municipality or the county where an installation is or will be located.

(b) Aggregate storage capacity in excess of 240 standard cubic feet water volume. For installations with an aggregate storage capacity in excess of 240 cubic feet water volume, the licensee shall submit the following to LP-Gas Operations at least 30 days prior to construction:

(1) CNG Form 1500;

(2) CNG Form 1500A with all applicable documents;

(3) a plat drawing from the appropriate appraisal district identifying the facility's property boundaries;

(4) a site plan of sufficient scale that identifies:

(A) the location, types, and sizes of all containers already on site or proposed to be on site;

(B) the distances from the containers and material handling equipment to the property lines, buildings, and railroad, pipeline, or roadway rights-of-way; and

(C) any known potential hazards.

(5) a nonrefundable fee of \$50 for the initial application. A nonrefundable fee of \$30 shall be required for any resubmission.

(c) LP-Gas Operations shall notify the applicant in writing outlining its findings. If the application is administratively denied, the applicant may modify the submission and resubmit it or may request a hearing in accordance with the general rules of practice and procedure of the Railroad Commission of Texas in Chapter 1 of this title (relating to Practice and Procedure).

(d) If the Railroad Commission finds after a public hearing that the proposed installation complies with the rules in this chapter and the statutes of the State of Texas, and does not constitute a danger to the public health, safety, and welfare, the Railroad Commission shall issue an interim approval order. The construction of the installation and the setting of the container shall not proceed until the applicant has received written notification of the interim approval order. Any interim approval order shall include a provision that such approval may be suspended or revoked if:

(1) the applicant has introduced CNG into the system prior to final approval; or

(2) a physical inspection of the installation indicates that it is not installed in compliance with the submitted plat drawing for the installation, the rules in this chapter, or the statutes of the State of Texas; or

(3) the installation constitutes a danger to the public health, safety, and welfare.

(e) If a CNG stationary installation, equipment, or appurtenances not specifically covered by the rules in this chapter has been or will be installed, LP-Gas Operations shall apply and require any reasonable safety provisions to ensure the CNG installation is safe for CNG service. If the affected entity disagrees with LP-Gas Operations' determination, the entity may request a hearing. The installation shall not be placed in CNG operation until LP-Gas Operations has determined the installation is safe for CNG service.

(f) Aggregate storage capacity of less than 240 standard cubic feet water volume.

(1) Within 10 calendar days following the completion of container installation, the licensee shall submit CNG Form 1501 to LP-Gas Operations stating:

(A) the installation fully complies with the statutes and the rules in this chapter;

(B) all necessary CNG licenses and certificates have been issued; and

(C) the date the installation has been placed in CNG service.

(2) Pay a nonrefundable fee of \$10 for each ASME container or DOT cylinder cascade listed on the form. A nonrefundable fee of \$20 shall be required for any resubmission.

(g) Notice of complete or incomplete form. LP-Gas Operations shall review all applications within 21 business days of receipt of all required information and shall notify the applicant in writing of any deficiencies.

(h) Expiration of application; extension.

(1) When LP-Gas Operations notifies an applicant of an incomplete CNG Form 1500, the applicant has 120 calendar days from the date of the notification letter to resubmit the corrected application or the application will expire. After 120 days, a new application shall be filed should the applicant wish to reactivate LP-Gas Operations review of the proposed installation.

(2) If the applicant requests an extension of the 120-day time period in writing, postmarked or physically delivered to LP-Gas Operations before the expiration date, the application may be renewed for up to 90 days as determined by LP-Gas Operations.

(3) If the subject installation is not completed within one year from the date of LP-Gas Operations' completed review, the applicant shall resubmit the application for LP-Gas Operations' review.

(i) Physical inspection of stationary installations.

(1) Aggregate storage capacity in excess of 240 standard cubic feet water volume. The applicant shall notify LP-Gas Operations when the installation is ready for inspection. If LP-Gas Operations does not physically inspect the facility within 30 calendar days of receipt of notice that the facility is ready for inspection, the applicant may operate the facility conditionally until the initial complete inspection is made. If any safety rule violations exist at the time of the initial inspection, the applicant may be required to cease CNG operation until the applicant corrects the violations.

(2) Aggregate storage capacity of less than 240 standard cubic feet water volume. After receipt of CNG Form 1501, LP-Gas Operations shall conduct an inspection as soon as possible to verify the installation described complies with the rules in this chapter. The applicant may operate the facility prior to inspection if the facility fully complies with the rules in this chapter. If any CNG statute or safety rule violations exist at the time of the initial inspection at a commercial installation, LP-Gas Operations may immediately remove the subject container, including any piping, appliances, appurtenances, or equipment connected to it from CNG service until the applicant corrects the violations.

(j) Material variances. If LP-Gas Operations determines the completed installation varies materially from the application originally accepted, the applicant shall correct the variance and notify LP-Gas Operations of the correction of the variance or resubmit the application. LP-Gas Operations' review of such resubmitted application shall comply with the procedure described in this section.

(k) In the event an applicant has requested an inspection and LP-Gas Operations' inspection identifies violations requiring modifications by the

applicant, LP-Gas Operations may assess an inspection fee to cover the costs associated with any additional inspection, including mileage and per diem rates set by the legislature.

(l) Appurtenances and equipment.

(1) All appurtenances and equipment placed into CNG service shall be certified, marked, or listed by a nationally recognized laboratory such as Underwriters Laboratory (UL), Factory Mutual (FM), CSA International, or such other laboratories approved by LP-Gas Operations unless:

(A) it is specifically prohibited for use by another section of this chapter; or

(B) there is no test specification or procedure developed by the testing laboratory for the appurtenance or equipment.

(2) Appurtenances and equipment that cannot be listed but are not prohibited for use by the rules in this chapter shall be acceptable for CNG service provided the appurtenances and equipment are installed in compliance with the applicable rules in this chapter.

(3) The licensee or operator of the appurtenances or equipment shall maintain documentation sufficient to substantiate any claims made regarding the safety of any valves, fittings, and equipment and shall, upon request, furnish copies to LP-Gas Operations.

(4) Compliance under this section does not ensure conformity with other state and federal regulations, such as those of the Texas Commission on Environmental Quality or its successor agencies.

The provisions of this §13.25 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456; amended to be effective August 30, 1999, 24 TexReg 6733; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.26. Design and Construction of Cylinders, Pressure Vessels, and Vapor Recovery Receivers.

(a) Cylinders and pressure vessels shall be fabricated of steel, aluminum, or composite materials.

(b) Cylinders shall be manufactured, inspected, marked, tested, and retested in accordance with United States Department of Transportation (DOT) regulations and exemptions for compressed natural gas (CNG) service. Fuel supply cylinders shall have a rated service pressure of not less than 2,400 psig at 70 degrees Fahrenheit. Cascade storage cylinders shall have a rated service pressure of not less than 3,600 psig at 70 degrees Fahrenheit. Steel cylinders shall be manufactured and tested in compliance with DOT 3AA specifications. Fiber reinforced plastic and full

composite cylinders shall comply with DOT FRP1 standard. Fiber reinforced plastic and hose wrapped composite cylinders shall comply with DOT FRP2 standard. Vapor recovery receivers shall have a minimum rated service pressure of 250 psig and be manufactured, inspected, marked, tested, and, if applicable, retested in accordance with DOT regulations or the American Society of Mechanical Engineers (ASME) Code.

(c) DOT regulations requiring "+" (plus) and "*" (star) markings on DOT cylinders shall not apply to CNG cylinders.

(d) Pressure vessels and containers other than cylinders shall be manufactured, inspected, marked, and tested in accordance with the "Rules for the Construction of Unfired Pressure Vessels," ASME Boiler and Pressure Vessel Code, Section VIII (Division I or II).

(e) In addition to other marking requirements, cylinders shall be labeled with the words, "FOR CNG ONLY," in letters at least one inch high in a contrasting color, and in a location which will be visible after installation. Each cylinder in a cascade need not be labeled provided the cascade is labeled on each visible side. Decals or stencils are acceptable.

(f) Field welding or brazing for the repair or alteration of a cylinder or ASME pressure vessel is prohibited.

The provisions of this §13.26 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456.

§13.27. Pressure Relief Devices.

(a) Each fuel supply cylinder shall be fitted with a pressure relief device in accordance with the following.

(1) Pressure relief devices for cylinders shall be in accordance with Compressed Gas Association (CGA) Pamphlet S-1.1, "Pressure Relief Device Standards-Part 1, Cylinders for Compressed Gases."

(2) Cylinders manufactured under Department of Transportation exemption or special permits that require fire tests for design qualification shall be equipped with pressure relief devices in accordance with CGA S-1.1 and of the type, temperature rating, pressure rating, number, and location used in the fire tests.

(3) The pressure relief device shall communicate with the fuel and be vented to the atmosphere by a method that will withstand the maximum pressure which will result.

(4) The discharge flow rate of the pressure relief device shall not be reduced below that required for the capacity of the container upon which the device is installed.

(5) Pressure relief devices shall be located so that the temperature to which they are subjected shall be representative of the temperature to which the cylinder is subjected.

(b) Containers (other than cylinders) and pressure vessels shall be provided with one or more spring-loaded pressure relief valves set to open in accordance with the American Society of Mechanical Engineers (ASME) Code. The pressure relief devices shall be installed directly into the appropriate nozzle opening of the container. However, container(s) may have a full-area stop valve between it and its pressure relieving device for inspection and repair purposes only. When such a stop valve is provided, it shall be so arranged that it can be locked or sealed open and it shall not be closed except by an authorized person. The authorized person shall remain stationed there during the period of the vessel's operation. During operation, the valve shall remain closed, and the authorized person shall again lock or seal the stop valve in the open position before leaving the stationed area.

(c) The minimum rate of discharge of pressure relief devices shall be in accordance with Compressed Gas Association (CGA) Pamphlet S-1.1 "Pressure Relief Device Standards-Part 1, Cylinders for Compressed Gases" or the ASME Code, whichever is applicable.

(d) Pressure relief valves for CNG service shall not be fitted with lifting devices. The adjustment, if external, shall be provided with means for sealing the adjustment to prevent tampering by unauthorized persons. If at any time such seal is broken, the valve shall be removed from service until it has been reset and sealed. Any adjustments necessary shall be made by the manufacturer or his authorized representative(s).

The provisions of this §13.27 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456.

§13.28. Pressure Gauges.

(a) Pressure gauges shall be designed for the normal pressure and temperature conditions to which the devices may be subjected with a burst pressure safety factor of at least four.

(b) Dials shall be graduated to read 1.2 times the maximum operating pressure of the system to which the gauge is attached.

(c) A gauge shall have an opening not to exceed 0.055 inches (number 54 drill size) at the inlet connection.

The provisions of this §13.28 adopted to be effective November 15, 1990, 15 TexReg 5936.

§13.29. Pressure Regulators.

(a) A pressure regulator inlet and each chamber shall be designed for its maximum working pressure with a pressure safety factor of at least four.

(b) Low pressure chambers shall provide for excessive pressure relief or be able to withstand the operating pressure of the upstream pressure chamber.

The provisions of this §13.29 adopted to be effective November 15, 1990, 15 TexReg 5936.

§13.30. Piping.

(a) Piping, tubing, fittings, gaskets, and packing material shall be compatible with the fuel under the service conditions.

(b) All tubing shall be a minimum of Type 304 Stainless Steel. All tubing connectors shall be a minimum of Type 304 Stainless Steel industrial type connectors having a minimum design pressure of 5,000 psig.

(c) Piping, tubing, fittings, and other piping components between a cylinder or pressure vessel and the first shutoff valve shall be capable of withstanding a hydrostatic test of at least four times the rated working pressure without structural failure.

(d) Piping shall be American Standard Testing Material (ASTM) steel, Schedule 80, or better. All pipe fittings shall be forged steel stamped 6,000 psi or greater.

(e) The following components or materials shall not be used:

(1) fittings, street ells, and other piping components of cast iron or semi-steel other than those complying with American Society for Testing and Materials (ASTM) Specifications A-536 (Grade 60-40-18), A-395, and A-47 (Grade 35018);

(2) plastic pipe, tubing, and fittings for high pressure service;

(3) galvanized pipe and fittings;

(4) aluminum pipe, tubing, and fittings;

(5) pipe nipples for the initial connection to a cylinder or pressure vessel;

(6) copper alloy with copper content exceeding 70%.

(f) Piping components such as strainers, snubbers, and expansion joints shall be permanently marked by the manufacturer to indicate the service ratings.

The provisions of this §13.30 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456.

§13.31. Valves.

(a) Valves, valve packing, and gaskets shall be suitable for the fuel over the full range of pressures and temperatures to which they may be subjected under normal operating conditions.

(b) Shutoff valves shall have a design working pressure not less than the rated working pressure of the entire system and shall be capable of withstanding a hydrostatic test of at least four times the rated service pressure without failure. Leakage shall not occur at less than one and one half times the rated service pressure using dry air as the test medium.

(c) Valves of cast iron or semi-steel other than those complying with ASTM Specifications A-536 (Grade 60-40-18), A-395, and A-47 (Grade 35018) shall not be used as primary shutoff valves.

(d) Valves of a design that will allow the valve stem to be removed without removal of the complete bonnet or disassembly of the valve body shall not be used.

(e) The manufacturer shall stamp or otherwise permanently mark the valve body to indicate the service ratings. Exception: Fuel supply container valves need not be marked as such.

The provisions of this §13.31 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456.

§13.32. *Hose and Hose Connections.*

(a) Hose and metallic hose shall be of or lined with materials that are resistant to corrosion and the actions of CNG.

(b) Hose, metallic hose, flexible metal hose, tubing, and their connections shall be suitable for the most severe pressure and temperature conditions expected under normal operating conditions with a burst pressure of at least four times the maximum working pressure.

(c) Hose assemblies shall be tested by the manufacturer or its designated representative prior to use at pressure at least twice the service pressure.

(d) Hose shall be continuously and distinctly marked with the manufacturer's name or trademark, the words "CNG service," and the working pressure. Metallic hose shall have a manufacturer's permanently attached tag marked with the manufacturer's name or trademark, the words "CNG service," and the working pressure. This subsection does not apply to the hose installed from the regulator to the mixer on a motor vehicle.

(e) Hose, metallic hose, or flexible metal hose used in CNG vehicle fuel system areas where a high degree of flexibility is required for vehicle safety shall comply with the requirements of subsections (a)-(d) of this section.

(f) Hose, metallic hose, or flexible metal hose may be used in fuel lines provided it meets the following requirements.

(1) The hose shall be capable of conducting an electrical current from one end of the hose to the

other end without the necessity of connecting a jumper wire from end to end.

(2) The length of the hose including the swaged fittings on each end shall not exceed 48 inches.

(3) The hose shall be protected from fretting and sources of extremely high heat.

(4) The hose shall have fittings or connectors on each end made of Type 304 or better stainless steel with a minimum design pressure of at least 5,000 psig.

The provisions of this §13.32 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective June 1, 1994, 19 TexReg 3168; amended to be effective August 9, 1995, 20 TexReg 5500.

§13.33. *Compression Equipment.*

(a) Compression equipment shall be designed for use with compressed natural gas (CNG) and for the pressures and temperatures to which it may be subjected under normal operating conditions. It shall have pressure relief devices which shall limit each stage pressure to the maximum allowable working pressure for the cylinder and piping associated with that stage of compression.

(b) When CNG compression equipment is operated unattended, it shall be equipped with a high discharge and low suction pressure automatic shutdown control.

(c) Control devices shall be designed for the pressure, temperature, and service expected under normal operating conditions.

The provisions of this §13.33 adopted to be effective November 15, 1990, 15 TexReg 5936.

§13.34. *Vehicle Fueling Connection.*

(a) A vehicle fueling connection shall provide for the reliable and secure connection of the fuel system cylinders to a source of compressed natural gas (CNG).

(b) The fueling connection shall be suitable for the pressure expected under normal conditions and corrosive conditions which might be encountered.

(c) The fueling connection shall prevent escape of gas when the connector is not properly engaged or becomes separated.

(d) The refueling connection on an engine fuel system shall be firmly supported, and shall:

(1) receive the fueling connector and accommodate the service pressure of the vehicle fuel system;

(2) incorporate a means to prevent the entry of dust, water, and other foreign material. If the means used is capable of sealing system pressure, it shall be capable of being depressurized before removal;

(3) have a different fueling connection for each pressure base vehicle fuel system.

(e) Any vehicle that will be fueled by an automatic dispenser shall be equipped with a fueling connection that complies with ANSI/AGA NGV1, Requirements for Natural Gas Vehicles (NGV) Refueling Connection Devices, Requirement 1-90.

The provisions of this §13.34 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective June 1, 1994, 19 TexReg 3168.

§13.35. Application for an Exception to a Safety Rule.

(a) A person may apply for an exception to the provisions of this chapter by filing CNG Form 1025 along with supporting documentation and a \$50 filing fee with LP-Gas Operations.

(b) The application shall contain the following:

(1) the section number of any applicable rules;

(2) the type of relief desired, including the exception requested and any information which may assist LP-Gas Operations in comprehending the requested exception;

(3) a concise statement of facts which supports the applicant's request for the exception, such as the reason for the exception, the safety aspects of the exception, and the social and/or economic impact of the exception;

(4) for all stationary installations, regardless of size, a description of the acreage and/or address upon which the subject of the exception will be located. The description shall be in writing and shall include:

(A) a site drawing;

(B) sufficient identification of the site so that determination of property boundaries may be made;

(C) a plat from the applicable appraisal district indicating the ownership of the land; and

(D) the legal authority under which the applicant, if not the owner, is permitted occupancy.

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

(6) an original signature, in ink, by the party filing the application or by the authorized representative;

(7) a list of the names and addresses of all interested entities as defined in subsection (c) of this section.

(c) Notice of the application for an exception to a safety rule.

(1) The applicant shall send a copy of CNG Form 1025 by certified mail, return receipt requested, to all affected entities as specified in paragraphs (2), (3), and (4) of this subsection on the same date on which the form is filed with or sent to LP-Gas Operations. The applicant shall include a notice to the

affected entities that any objection shall be filed with LP-Gas Operations within 18 calendar days of the date of postmark. The applicant shall file all return receipts with LP-Gas Operations as proof of notice.

(2) If an exception is requested on a stationary site, the affected entities to whom the applicant shall 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 or fire marshal, if the site is within municipal limits; and

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

(3) If an exception is requested on a nonstationary site, affected entities to whom the applicant shall give notice include but are not limited to:

(A) the Texas Department of Public Safety; and

(B) all CNG loading and unloading facilities utilized by the applicant.

(4) LP-Gas Operations 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 entity.

(d) Objections to the requested exception shall be in writing, filed with LP-Gas Operations within 18 calendar days of the postmark of the application, and shall be based on facts that tend to demonstrate that, as proposed, the exception would have an adverse effect on public health, safety, or welfare. LP-Gas Operations may decline to consider objections based solely on claims of diminished property or esthetic values in the area.

(e) LP-Gas Operations shall review the application within 21 business days of receipt of the application. If LP-Gas Operations does not receive any objections from any affected entities as defined in subsection (c) of this section, the LP-Gas Operations director may administratively grant the exception if the LP-Gas Operations director determines that the installation, as proposed, does not adversely affect the health or safety of the public. LP-Gas Operations shall notify the applicant in writing by the end of the 21-day review period and, if approved, the installation shall be installed within one year from the date of approval. LP-Gas Operations shall also advise the applicant at the end of the objection period as to whether any objections were received and whether the applicant may proceed. If the LP-Gas Operations director denies the exception, LP-Gas Operations shall notify the applicant in writing, outlining the reasons and any specific deficiencies. The applicant may modify the application to correct the deficiencies and resubmit the application along with a \$30 resubmission fee, or may request a hearing on the matter. To be granted a

hearing, the applicant shall file a written request for hearing within 14 calendar days of receiving notice of the administrative denial.

(f) A hearing shall be held when LP-Gas Operations receives an objection as set out in subsection (d) of this section from any affected entity, or when the applicant requests one following an administrative denial. LP-Gas Operations shall mail the notice of hearing to the applicant and all objecting entities by certified mail, return receipt requested, at least 21 calendar days prior to the date of the hearing. Hearings will be held in accordance with the Texas Government Code, Chapter 2001, et seq., Chapter 1 of this title (relating to Practice and Procedure), and this chapter.

(g) Applicants intentionally submitting incorrect or misleading information are subject to penalties in the Texas Natural Resources Code, §116.142, and the filing of incorrect or misleading information shall be grounds for dismissing the application with prejudice.

(h) After hearing, exceptions to this chapter may be granted by the Commission if the Commission finds that granting the exception for the installation, as proposed, will not adversely affect the safety of the public.

(i) Temporary exception. For good cause shown, LP-Gas Operations may grant a temporary exception, which shall not exceed 30 days, to the examination requirements for representatives and operations supervisors. Good cause shall include the death of a sole proprietor or partner. An applicant for a temporary exception shall comply with all applicable safety requirements and LP-Gas Operations shall obtain information showing that the exception will not be hazardous to the public.

(j) A request for an exception shall expire if it is inactive for 90 calendar days after the date of the letter in which the applicant was notified by LP-Gas Operations of an incomplete request. The applicant may resubmit an exception request.

The provisions of this §13.35 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 15, 1993, 18 TexReg 6456; amended to be effective August 30, 1999, 24 TexReg 6734; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.36. Report of CNG Incident/Accident.

(a) In case of an incident involving single release of compressed natural gas (CNG) during or following CNG transfer or during container transportation, or an accident at any location where CNG is the cause or is suspected to be the cause, the licensee owning, operating, or servicing the equipment or the

installation shall notify LP-Gas Operations by telephone within two hours of discovery after the licensee has knowledge of the incident or accident. Any loss of CNG which is less than 1.0% of the gross amount delivered, stored, or withdrawn need not be reported. However, any loss occurring as a result of a pullaway shall be reported. Any individual reporting shall leave his or her name, and telephone number where he or she can be reached for further information.

(b) The telephone notification required by this section shall be made to the Railroad Commission's 24-hour emergency line at (512) 463-6788 and shall include the following information:

- (1) date and time of the incident or accident;
- (2) type of structure or equipment involved;
- (3) resident's or operator's name;
- (4) physical location;
- (5) number of injuries and/or fatalities;
- (6) whether fire, explosion, or gas leak has occurred;
- (7) whether gas is leaking; and
- (8) whether immediate assistance from LP-Gas Operations is requested.

(c) Any transport unit required to be registered with LP-Gas Operations in accordance with §13.69 of this title (relating to Registration and Transfer of CNG Transports and CNG Form 1004 Decal or Letter of Authority) which is involved in an accident where there is damage to the tank, piping or appurtenances, or any release of CNG resulting from an accident shall be reported to LP-Gas Operations in accordance with this section regardless of the accident location. Any CNG powered motor vehicle used for school transportation or mass transit including any state owned vehicle which is involved in an accident resulting in a substantial release of CNG or damage to the CNG conversion equipment shall be reported to LP-Gas Operations in accordance with this section regardless of accident location.

(d) Following the initial telephone report, a CNG Form 1020, Report of CNG Incident/Accident, shall be submitted to LP-Gas Operations. The report shall be postmarked within 14 calendar days of the date of initial notification to LP-Gas Operations.

The provisions of this §13.36 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.38. Removal from CNG Service.

(a) If LP-Gas Operations determines that any compressed natural gas (CNG) cylinder constitutes an immediate danger to the public health, safety, and welfare, LP-Gas Operations shall require the

immediate removal of the CNG by a properly licensed company to the extent necessary to eliminate the danger. If LP-Gas Operations determines that any CNG appliance, equipment, or system constitutes an immediate danger to the public health, safety, and welfare, LP-Gas Operations shall require the immediate disconnection by a properly licensed company of such appliance, equipment, or system from the CNG cylinder it services.

(b) If the affected entity disagrees with the placement of a warning tag, or with LP-Gas Operations' findings in subsection (a) of this section, the entity may request an investigation into the matter. LP-Gas Operations shall notify such entity of its finding. If the entity disagrees, the entity may request or LP-Gas Operations on its own motion may call a hearing. Such installation shall be brought into compliance or removed from service until such time as the final decision is rendered.

The provisions of this §13.38 adopted to be effective November 15, 1990, 15 TexReg 5936; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.39. Filling Unapproved Containers Prohibited. No licensee shall introduce compressed natural gas (CNG) into any container if he has knowledge or notice that such CNG container or system was not installed in accordance with the statutes of the State of Texas, and with the rules and regulations in effect at the time of installation. Exception: This section does not apply to motor fuel or mobile fuel containers and systems installed on vehicles licensed in states other than Texas.

The provisions of this §13.39 adopted to be effective November 15, 1990, 15 TexReg 5936.

§13.40. Manufacturer's Nameplates and Markings on ASME Containers.

(a) Compressed natural gas (CNG) shall not be introduced into any American Society of Mechanical Engineers (ASME) container which is not equipped with a manufacturer's original nameplate or a manufacturer's replacement nameplate permanently attached to the container. No ASME container manufactured on or after November 1, 1994, shall be used in the State of Texas unless it has attached to it a stainless steel manufacturer's nameplate. The nameplate shall be attached in a manner that will minimize corrosion of the nameplate or its attachments or that will not contribute to the corrosion of the container.

(b) If the nameplate is attached directly to the container, the 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 legible characters:

(1) the mark or symbol approved by 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 standard cubic feet;

(4) the maximum allowable working pressure of the container in pounds per square inch (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 degrees Fahrenheit;

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

(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; and

(9) the date of manufacture.

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

(e) Containers manufactured prior to November 1, 1994, which may have corroded or rusted nameplates shall have the following minimum information readable on the manufacturer's nameplate:

(1) name of the container manufacturer;

(2) manufacturer's serial number;

(3) working pressure; and

(4) water capacity.

The provisions of this §13.40 adopted to be effective June 1, 1994, 19 TexReg 3169.

SUBCHAPTER C. CLASSIFICATION, REGISTRATION, AND EXAMINATION

§13.61. Licenses, Related Fees, and Licensing Requirements.

(a) A prospective licensee may apply to LP-Gas Operations for one or more licenses specified in subsection (b)(1) - (6) of this section. Fees required to be paid shall be those established by the Commission and in effect at the time of licensing or renewal. A person shall not engage in CNG activities unless that person has obtained a license as specified in this section. If a license expires or lapses, the person shall immediately cease CNG operations.

(b) The license categories and fees are as follows.

(1) A Category 1 license for manufacturers of CNG cylinders authorizes the manufacture, assembly, repair, testing, sale, installation, or subframing of CNG

cylinders. The original license fee is \$1,000; the renewal fee is \$600.

(2) A Category 2 license for general installers and repairmen authorizes the sale, installation, service, or repair of CNG systems, including cylinders. The original license fee is \$300; the renewal fee is \$150.

(3) A Category 3 license for retail and wholesale dealers authorizes the sale, storage, transportation for delivery, or dispensing of CNG for use other than by an ultimate consumer, and the sale, installation, service, or repair of CNG systems as set out in Categories 2, 5, and 6. The original license fee is \$750; the renewal fee is \$300.

(4) A Category 4 license for testing laboratories authorizes the testing of CNG cylinders. The original license fee is \$400; the renewal fee is \$200.

(5) A Category 5 license for service stations or cylinder exchangers authorizes the operation of a CNG service station, including filling CNG cylinders, or the operation of a cylinder exchange dealership, including filling CNG cylinders, the sale of CNG in cylinders, the sale of CNG cylinders, and the replacement of cylinder valves. The original license fee is \$150; the renewal fee is \$70.

(6) A Category 6 license for equipment dealers authorizes the sale of CNG cylinders or systems. The original license fee is \$100; the renewal fee is \$50.

(c) An ultimate consumer is not subject to the licensing requirements of this title in order to perform those CNG activities dealing only with the ultimate consumer.

(d) An original manufacturer of a new motor vehicle powered by CNG or a subcontractor of a manufacturer who produces a new CNG powered motor vehicle for the manufacturer is not subject to the licensing requirements of this chapter, but shall comply with all other regulations for compressed natural gas in this chapter.

(e) A license obtained by an individual, partnership, corporation, or other legal entity shall extend to the entity's employees who are performing CNG work, provided that each employee is properly certified as required by this chapter.

(f) Licensees shall maintain a copy of the current Regulations for Compressed Natural Gas and shall provide at least one copy to each company representative and operations supervisor. The copies shall be available to employees during business hours.

(g) Licensees shall have copies of all current licenses and examination identification cards for employees at each location available for inspection during regular business hours.

(h) Licenses issued under this chapter expire one year after issuance at midnight on the last day of the month previous to the month in which they are issued.

(i) For license renewals, LP-Gas Operations shall notify the licensee in writing at the address on file with LP-Gas Operations of the impending license expiration at least 30 calendar days before the date the license is scheduled to expire. Renewals shall be submitted to LP-Gas Operations along with the license renewal fee specified in subsection (b) of this section on or before the last day of the month in which the license expires in order for the licensee to continue CNG activities. Failure to meet the renewal deadline set forth in this section shall result in expiration of the license. If a person's license expires, that person shall immediately cease performance of any CNG activities.

(1) If a person's license has been expired for 90 calendar days or fewer, the person shall submit a renewal fee that is equal to 1 1/2 times the renewal fee required in subsection (b) of this section. Upon receipt of the renewal fee, LP-Gas Operations shall verify that the person's license has not been suspended, revoked, or expired for more than one year. After verification, if the licensee has met all other requirements for licensing, LP-Gas Operations shall renew the license, and the person may resume CNG activities.

(2) If a person's license has been expired for more than 90 calendar days but less than one year, the person shall submit a renewal fee that is equal to two times the renewal fee required in subsection (b) of this section. Upon receipt of the renewal fee, LP-Gas Operations shall verify that the person's license has not been suspended, revoked, or expired for more than one year. After verification, if the licensee has met all other requirements for licensing, LP-Gas Operations shall renew the license, and the person may resume CNG activities.

(3) If a person's license has been expired for one year or longer, that person may not renew, but shall comply with the requirements for issuance of an original license.

(4) A person who was licensed in this state, moved to another state, and is currently licensed and has been in practice in the other state for the two years preceding the date of application, may obtain a new license without reexamination. The person shall pay to LP-Gas Operations a fee that is equal to two times the renewal fee required by subsection (b) of this section.

(A) As a prerequisite to licensing pursuant to this provision, the person shall submit, in addition to an application for licensing, proof of having been in practice and licensed in good standing in another state continuously for the two years immediately preceding the filing of the application;

(B) A person licensed under this provision shall be required to comply with all

requirements of licensing other than the examination requirement, including but not limited to the insurance requirements as specified in §13.62 of this title (relating to Insurance Requirements).

(j) Applicants for license or license renewal shall file with LP-Gas Operations CNG Form 1001 designating a company representative who shall be an owner or employee of the licensee, and shall be directly responsible for actively supervising CNG operations of the licensee. A licensee may have more than one company representative.

(1) An applicant for license shall not engage in CNG activities governed by the Texas Natural Resources Code, Chapter 116, and the Regulations for Compressed Natural Gas, until its company representative has successfully completed the management examination administered by AFRED.

(2) The licensee shall notify LP-Gas Operations in writing upon termination of its company representative of record and shall at the same time designate a replacement by submitting a new CNG Form 1001.

(3) The licensee shall cease operations if, at the termination of its company representative, there is no other qualified company representative of the licensee who has complied with the Commission's requirements. The licensee shall not resume CNG activities until such time as it has a properly qualified company representative.

(k) In addition to complying with other licensing requirements set out in the Texas Natural Resources Code and the Regulations for Compressed Natural Gas, applicants for license or license renewal in the following categories shall comply with the specified additional requirements.

(1) An applicant for a Category 1 license or renewal shall file with LP-Gas Operations for each of its outlets legible copies of:

(A) its current DOT authorization. A licensee shall not continue to operate after the expiration date of the DOT authorization; and/or

(B) its current ASME Code, Section VIII certificate of authorization or "R" certificate. If ASME is unable to issue a renewed certificate of authorization prior to the expiration date, the licensee may request in writing an extension of time not to exceed 60 calendar days past the expiration date. The licensee's request for extension shall be received by LP-Gas Operations prior to the expiration date of the ASME certificate of authorization referred to in this section, and shall include a letter or statement from ASME that the agency is unable to issue the renewal certificate of authorization prior to expiration and that a temporary extension will be granted for its purposes. A licensee shall not continue to operate after the expiration date of an ASME certificate of authorization until the licensee files a current ASME certificate of authorization with LP-Gas Operations, or LP-Gas Operations grants a temporary exception.

(2) An applicant for a Category 4 license or renewal shall file a properly completed CNG Form 1505 with LP-Gas Operations, certifying that the applicant will follow the testing procedures indicated. CNG Form 1505 shall be signed by the appropriate CNG company representative designated on CNG Form 1001.

The provisions of this §13.61 adopted to be effective June 13, 1995, 20 TexReg 3984; amended to be effective August 30, 1999, 24 TexReg 6733; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.62. Insurance Requirements.

(a) CNG licensees or applicants for license shall comply with the minimum amounts of insurance specified in Table 1 of this section.

**§13.62. INSURANCE REQUIREMENTS
TABLE 1**

Category of License	Type of Coverage	Form Required	Statement in Lieu of Required Insurance Filing
All	Workers' Compensation, including Employer's Liability	The Acord™ form or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier	CNG Form 1996B

		containing all required information	
All	Alternative to Workers' Compensation including Employer's Liability, or Accident/Health insurance coverage: Medical expenses in the principal amount of at least \$150,000; accidental death benefits in the principal amount of at least \$100,000; loss of limb or sight on a scale based on principal amount of at least \$100,000; loss of income based on at least 60% of employee's pre-injury income for at least 52 weeks, subject to a maximum weekly wage calculated annually by the Texas Workforce Commission	The Acord™ form or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier containing all required information	N/A
2, 5, 6	General liability coverage including: premises and operations in an amount not less than \$25,000 per occurrence and \$50,000 aggregate	The Acord™ form or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier containing all required information	CNG Form 1998B
1, 3, 4	Completed operations and products liability insurance in an amount not less than \$300,000 aggregate	The Acord™ form or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier containing all required information	CNG Form 1998B
3 and Ultimate Consumer	Motor vehicle coverage: minimum \$500,000 combined single limit for bodily injuries to or death of all persons injured or killed in any one accident, and loss or damage to property of others in any one accident	The Acord™ form or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier containing all required information	CNG Form 1997B

(b) Before LP-Gas Operations grants or renews a license, the applicant shall submit either:

(1) An insurance Acord™ form; or any other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier containing all required information. The forms must be issued by an insurance company authorized or accepted by the Texas Department of Insurance; or

(2) properly completed documents demonstrating the applicant's compliance with the self-insurance requirements in §13.63 of this title (relating to Qualification as Self-Insured).

(c) A licensee shall not perform any licensed activity under §13.61 of this title (relating to

Licensing) unless insurance coverage required by this section is in effect.

(d) Except as provided in the column relating to Statements in Lieu of Required Insurance Filing in Table 1, subsection (a) of this section, and paragraphs (1) - (5) of this subsection, the types and amounts of insurance specified in subsection (a) of this section are required while engaging in any of the activities set forth in this section or any activity incidental thereto.

(1) A Category 3 licensee or applicant for license or ultimate consumer that does not operate or contemplate the operation of a CNG transport and does not transport or contemplate the delivery of CNG cylinders by vehicle in any manner may file a CNG Form 1997B in lieu of filing motor vehicle bodily

injury and property damage liability insurance form. The licensee or applicant for a license must file the required insurance form with LP-Gas Operations before operating a motor vehicle equipped with a CNG cargo container or transporting CNG by vehicle in any manner.

(2) 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 may file a CNG Form 1998B in lieu of filing a general liability insurance form. The licensee or applicant for a license must file the required insurance form with LP-Gas Operations before engaging in any operations that require general liability insurance.

(3) A licensee or applicant for license that does not employ or contemplate the hiring of an employee or employees to be engaged in CNG related activities in Texas may file a CNG Form 1996B in lieu of filing a workers' compensation insurance form, including employer's liability insurance or alternative accident and health insurance coverage. The licensee or applicant for a license must file the required insurance form with LP-Gas Operations before hiring any person as an employee engaged in CNG related work.

(4) A licensee or applicant for a license that does not engage in or contemplate engaging in any CNG operations that would be covered by completed operations or products liability insurance, or both, may file CNG Form 1998B in lieu of a completed operations and/or products liability insurance form. The licensee or applicant for a license shall file the required insurance form with LP-Gas Operations before engaging in any operations that require completed operations and/or products liability insurance.

(5) A licensee may protect its employees by obtaining accident and health insurance coverage from an insurance company authorized to write such policies in this state as an alternative to workers' compensation coverage. The alternative coverage shall be in the amounts specified in Table 1 of this section.

(e) As evidence that required insurance has been secured and is in force, insurance forms which are approved by the Texas Department of Insurance shall be filed with LP-Gas Operations before licensing, license renewal, and during the entire period that the license is in effect. Any document filed with LP-Gas Operations in a timely manner which is not completed in accordance with the instructions indicated on the insurance forms supplied by LP-Gas Operations, but which complies with the substantive requirements of this section and with the rules adopted under this section, may be considered by LP-Gas Operations to be evidence that required insurance has been secured and is in force for a temporary period not to exceed 45

days. During this temporary period, a licensee shall file with LP-Gas Operations an amended certificate of insurance which complies with all procedural and substantive requirements of this section and this chapter.

(f) All certificates filed under this section shall be continuous in duration and shall remain on file with LP-Gas Operations during the entire period that the license is in effect.

(g) Each licensee shall file CNG Form 1999 or other written notice with LP-Gas Operations at least 30 calendar days before the cancellation of any insurance coverage. The 30-day period commences on the date the notice is actually received by LP-Gas Operations.

(h) A state agency or institution, county, municipality, school district, or other governmental subdivision may meet the requirements relating to general liability and/or motor vehicle liability insurance or workers' compensation coverage by filing CNG Form 1995 with LP-Gas Operations as evidence of self-insurance, if permitted by the Texas Labor Code, Title 5, Subtitle C, and Texas Natural Resources Code, §116.036.

(i) Each licensee shall promptly notify LP-Gas Operations of any change in insurance coverage or insurance carrier by filing a properly completed revised Acord™ form; other form approved by the Texas Department of Insurance that has been prepared and signed by the insurance carrier containing all required information; or documents demonstrating the applicant's compliance with the self-insurance requirements set forth in §13.63 of this title (relating to Qualification as Self-Insured). Failure to promptly notify LP-Gas Operations of a change in the status of insurance coverage or insurance carrier may result in an enforcement action and an administrative penalty.

The provisions of this §13.62 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective October 15, 1993, 18 TexReg 6457; amended to be effective November 29, 1993, 18 TexReg 8457; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective November 12, 2007, 32 TexReg 8127; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.63. Qualification as Self-Insured.

(a) General qualifications. LP-Gas Operations may approve the application of a CNG licensee to qualify as a self-insurer if such licensee furnishes a true and accurate statement of its financial condition and other evidence which establishes to the satisfaction of LP-Gas Operations the ability of such licensee to satisfy its obligations for the minimum insurance requirements specified in §13.62 of this title (relating to Insurance Requirements). This section shall not apply to LP-Gas Operations' licensing requirements for worker's

compensation insurance, including employer's liability coverage.

(b) Applicant guidelines. In addition to filing a CNG Form 1027, Application for Qualification as Self-Insurer, an applicant applying for self-insurer status covering general liability, including premises and operations coverage, shall submit materials that will allow LP-Gas Operations to determine whether:

(1) the net worth of the applicant is adequate in relationship to the size of operations and the extent of its request for self-insurance authority. The applicant should demonstrate that it will maintain a net worth sufficient to ensure that it will be able to meet its statutory obligations to the public to pay all claims relating to general liability, including premises and operations coverage in the event of a claim;

(2) the applicant has a sound self-insurance program. The applicant shall demonstrate that it has established, and will maintain an insurance program that will protect the public against all claims involving CNG activities to the same extent as the minimum limits applicable pursuant to §13.61(a)(6) and (7) of this title (relating to Licensing). Such a program may include, but not be limited to, one or more of the following: reserves; sinking funds; third party financial guarantees; parent company or affiliate sureties; excess insurance coverage; or other similar arrangements;

(3) the applicant presents evidence that it meets the requirements for motor carrier self-insurance promulgated by the Texas Department of Transportation.

(c) Other securities or agreements. LP-Gas Operations may consider applications for approval of other securities or agreements, or may require any other document(s) which may be necessary to ensure such application satisfies that the security or agreement offered will afford adequate security for protection of the public.

(d) Periodic reports. Semiannual reports and annual statements reflecting the applicant's financial condition and status of its self-insurance program shall be filed with LP-Gas Operations during the period of its self-insurer status by March 10 and September 10 of each year.

(e) Duration of self-insurer status. LP-Gas Operations may approve the applicant as a self-insurer for any specific time period, or for an indefinite period until revoked by LP-Gas Operations.

(f) Revocation of a self-insurer status. LP-Gas Operations may at any time, upon 10 days notice to the applicant, require the applicant to appear and demonstrate that it continues to have adequate financial resources to pay all general liability, including premises and operations coverage claims, and that it remains in compliance with the other requirements of this section. If the applicant fails to so

demonstrate, its self-insurer status shall be revoked and it may be ineligible for self-insurance in the future.

(g) A state agency or institution, county, municipality, school district, or other governmental subdivision may meet the requirements for general liability and/or motor vehicle liability insurance or workers' compensation coverage of §13.62 of this title if permitted by the Texas Workers' Compensation Act, Texas Labor Code, Title 5, Subtitle A; and the Texas Natural Resources Code, §116.036, by submitting a CNG Form 1995 to LP-Gas Operations.

The provisions of this §13.63 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective November 29, 1993, 18 TexReg 8457; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.64. Qualification by Irrevocable Letter of Credit. When an applicant submits a CNG Form 1028, Application to use Irrevocable Letter of Credit, as an alternative to insurance, letters of credit shall be subject to the following conditions:

(1) the letter may only be issued by a federally chartered and federally insured bank authorized to do business in the United States;

(2) the letter of credit must be irrevocable during their terms;

(3) the letter must be payable to the commission in part or in full upon demand and receipt from the commission of a notice of forfeiture;

(4) this section shall not apply to LP-Gas Operations' licensing requirements for worker's compensation insurance, including employer's liability coverage.

The provisions of this §13.64 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.65. Statements in Lieu of Insurance Certificates.

(a) A Category 3 or 6 licensee or applicant for license that does not operate or contemplate the operation of a CNG transport and does not transport or contemplate the delivery of CNG cylinders by vehicle in any manner, may file with LP-Gas Operations a CNG Form 1997B in lieu of filing a certificate of motor vehicle bodily injury and property damage liability 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 file with LP-Gas Operations a CNG Form 1998B 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 CNG related activities in Texas may file with LP-Gas Operations a CNG Form 1996B in lieu of filing a certificate of worker's compensation insurance including employer's liability insurance.

(d) Any statement filed pursuant to subsections (a) - (c) 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.

The provisions of this §13.65 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.66. Limitation/Avoidance of Licensee Liability.

(a) A compressed natural gas (CNG) licensee may not limit or avoid its liability or that of its insurer for damages proximately caused by any negligent act or acts of the licensee in handling CNG.

(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 section does not apply to negotiations and/or settlements made subsequent to the recognition by the parties to a contract of the 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 on the following:

(1) unauthorized, unsafe, or improper applications of CNG and/or CNG systems or equipment by any user or other person;

(2) any use or operation of CNG and/or CNG systems or equipment contrary to the specific representations made by any user or other person to a CNG licensee during or preceding installations or servicing of such CNG systems or equipment and relied upon by such CNG licensee in selecting, designing, installing, or servicing such systems or equipment; or

(3) any modification, change, installation, alteration, tampering, or other action by any unlicensed person, to or upon any CNG system or equipment.

The provisions of this §13.66 adopted to be effective November 15, 1990, 15 TexReg 5941.

§13.67. Changes in Ownership and/or Form of Dealership.

(a) Transfer of dealership outlet or location by sale, lease, or gift.

(1) Licensing. The purchaser, lessee, or donee of any dealership outlet or location shall apply for and be issued a notice of tentative CNG license approval, prior to engaging in the transfer of such an entity. Such tentative CNG license approval, when issued, shall be valid for a period not to exceed 90 days from the date of issue. During this 90-day period, the licensee and the recipient of the tentative CNG license approval shall be allowed to conduct business under this subchapter. Any applicable licensing fees shall be prorated to cover this period of tentative approval and shall be payable at the time of application for tentative approval. Any portion of the licensing fees unused during this 90-day period shall be applied on a prorated basis to the licensing fee required of the new purchaser, lessee, or donee of such dealership or outlet.

(2) Notice. After the transfer of any dealership outlet or location, the new operator/owner or the authorized representative thereof, shall notify LP-Gas Operations of the completed transfer of such dealership by certified mail immediately upon the completion of said transfer, and file with LP-Gas Operations all forms of application for licensing or registration required by this subchapter.

(b) Other changes in ownership.

(1) Licensing. Upon the death of a sole proprietor or partner, the dissolution of a corporation or partnership, any changes in the members of a partnership, or other changes in ownership not specifically provided for elsewhere in this section, the CNG operation shall continue for no longer than 30 days, unless a CNG license is issued to the successor in interest and the notice requirements of paragraph (2) of this subsection have been satisfied. This 30-day period shall be allowed only when the licensee meets all other pertinent requirements of this subchapter, specifically those regarding the licensee's representative.

(2) Notice. The successor in interest shall notify LP-Gas Operations by certified mail of the death of a sole proprietorship or partner, the dissolution of a corporation or partnership, any change in partnership members, or other changes in ownership not specifically provided for in this section.

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

(4) Transfer of stock. Notwithstanding, the provisions of paragraphs (1) - (3) of this subsection, a change in ownership does not occur, for the purpose of this section, when shares of stock in a corporation are transferred, exchanged, sold, or alienated, unless such action creates a new controlling interest in such corporation.

(c) Changes in dealership business form.

(1) Licensing. When a dealership converts from one business entity to a different kind of business entity, the newly formed entity shall apply for and be issued a notice of tentative CNG license approval, prior to engaging in the conversion. Such tentative CNG license approval, when issued, shall be valid for a period not to exceed 90 days from the date of issue. During this 90-day period, the licensee (regardless of form) shall be allowed to conduct business under this subchapter. Any applicable licensing fees shall be paid or maintained to cover this period of tentative approval and shall be paid or payable at the time of application for tentative approval. Any fees paid by this original entity shall be credited on a prorated basis to the account of the new entity.

(2) Notice. An authorized representative of the original entity or of the new entity shall notify LP-Gas Operations by certified mail of an accomplished change in business form immediately upon the completion of such conversion, and shall cause to be filed with LP-Gas Operations all forms of applications for licensing or registration required by this subchapter.

The provisions of this §13.67 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.68. Dealership Name Change.

(a) Duty to report. A licensee shall file the following forms evidencing any change in the licensee's name with LP-Gas Operations prior to engaging in operations that require a CNG license under a new business form:

- (1) an amended application for license;
- (2) certificates of insurance and/or statement in lieu of insurance (where permitted); and
- (3) any other forms required by LP-Gas Operations.

(b) Duty to register. A licensee operating under a changed name shall cause the reregistration of any CNG transport unit from the old name to the changed name of the license by filing an amended CNG Form 1007, Compressed Natural Gas Transport Registration, with LP-Gas Operations prior to the use of any such unit in the transport or delivery of CNG in the State of Texas.

The provisions of this §13.68 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.69. Registration and Transfer of CNG Transports and CNG Form 1004 Decal or Letter of Authority.

(a) A person who operates a transport equipped with CNG cargo tanks or any cylinder delivery unit, regardless of who owns the transport or unit, shall register such transport or unit with LP-Gas Operations in the name or names under which the operator conducts business in Texas prior to the transport or unit being used in CNG service.

(1) To register a unit previously unregistered in Texas, the operator of the unit shall:

- (A) pay to LP-Gas Operations the \$270 registration fee for each bobtail truck, semitrailer, cylinder delivery unit, or other motor vehicle equipped with CNG cargo tanks; and
- (B) file a properly completed CNG Form 1007.

(2) To register a specification unit which was previously registered in Texas but for which the registration has expired, the operator of the unit shall:

- (A) pay to LP-Gas Operations the \$270 registration fee;
- (B) file a properly completed CNG Form 1007; and
- (C) file a copy of the latest test results if an expired unit has not been used in the transportation of CNG for over one year.

(3) To transfer a unit, the new owner of the transport shall:

- (A) pay the \$100 transfer fee for each unit; and
- (B) file a properly completed CNG Form 1007.

(b) LP-Gas Operations may also request that an operator registering or transferring any unit to file a copy of the Manufacturer's Data Report.

(c) When all registration or transfer requirements have been met, LP-Gas Operations shall issue CNG Form 1004 or letter of authority which shall be properly affixed as instructed on the decal or letter or maintained on the bobtail or transport trailer. CNG Form 1004 or letter of authority shall authorize the licensee or ultimate consumer to whom it has been issued and no other person to operate such unit in the transportation of CNG and to fill the transport containers.

(1) A person shall not operate a CNG transport unit or cylinder delivery unit or introduce CNG into a transport container in Texas unless the CNG Form 1004 or letter of authority has been properly affixed as instructed on the decal or the letter or maintained on the bobtail or transport trailer or unless its operation has been specifically approved by LP-Gas Operations.

(2) CNG Form 1004 or letter of authority shall not be transferable by the person to whom it has been issued, but shall be registered by any subsequent

licensee or ultimate consumer prior to the unit being placed into CNG service.

(3) This subsection shall not apply to:

(A) a container manufacturer/fabricator from introducing a reasonable amount of CNG into a newly constructed container in order to properly test the vessel, piping system, and appurtenances prior to the initial sale of the container. The CNG shall be removed from the transport container prior to the transport leaving the manufacturer's or fabricator's premises; or

(B) a person who introduces a maximum of 500 cubic feet of CNG into a newly constructed transport container when such container will provide the motor fuel to the chassis engine for the purpose of allowing the unit to reach its destination.

(4) LP-Gas Operations shall not issue a CNG Form 1004 or letter of authority if LP-Gas Operations or a Category 1 or 4 licensee determines that the transport is unsafe for CNG service.

(5) If a CNG Form 1004 decal or letter of authority on a unit currently registered with LP-Gas Operations is destroyed, lost, or damaged, the operator of that vehicle shall obtain a replacement by filing CNG Form 1018B and a \$50 replacement fee with LP-Gas Operations.

The provisions of this §13.69 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 13, 1995, 20 TexReg 3984; amended to be effective August 30, 1999, 24 TexReg 6733; amended to be effective October 22,

2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.70. Examination Requirements and Renewals.

(a) Examination general provisions.

(1) No individual may work or be employed in any capacity which requires contact with CNG or CNG systems until that individual has submitted to and successfully completed an examination which measures the competency of that individual to perform the CNG related activities anticipated, and tests working knowledge of the Texas Natural Resources Code and the regulations for compressed natural gas related to the type of CNG work anticipated. Table 1 of this section sets forth specific requirements for examination for each category of license. This section applies to all licensees and their employees who perform CNG related activities, and also applies to any ultimate consumer who has purchased, leased, or obtained other rights in any vessel defined as a CNG transport by this chapter and any employee of such ultimate consumer if that employee drives or in any way operates such a CNG transport. Driving a motor vehicle powered by CNG or fueling of motor vehicles for an ultimate consumer by the ultimate consumer or its employees do not in themselves constitute CNG related activities. Only paragraph (2) of this subsection applies to an employee of an ultimate consumer or a state agency or institution, county, municipality, school district, or other governmental subdivision.

**Examination and Other Requirements for Licenses by Category
Table 1**

	License Categories					
	1	2	3	4	5	6
Employee Level Exams Offered:						
1. Company Representative Management Exam	*	*	*	*	*	*
2. Operations Supervisor (Branch Manager) Management Exam	*	*	*	*	*	*
3. Employee - CNG Service and Installation Exam	*	*				
4. Employee - CNG DOT Cylinder Filling Exam			*		*	

5. Employee - CNG Transport Driver/Service and Installation, including CNG DOT Cylinder Filling Exam, or Ultimate Consumer (any ultimate consumer who has purchased, leased, or obtained other rights in any vessel defined as a CNG transport, and any employee of the ultimate consumer who drives or in any way operates a CNG transport must pass the CNG transport driver/service and installation, including the DOT cylinder filling, examination)		*	*		*	
6. File CNG Form 1016	*	*	*	*	*	*
7. Employee - Pay \$25 Annual Renewal Fee on or before May 31 each year	*	*	*	*	*	*
8. File CNG Form 1016B (applies to the installation, service, or repair of CNG systems and the installation of CNG cylinders, excluding the installation, service, or repair of CNG carburetion equipment for the categories marked)	*	*				

(A) Individuals wishing to take a management-level rules examination (for company representatives or operations supervisors) shall pay a nonrefundable fee of \$70 before taking any such examination.

(B) Individuals wishing to take an employee-level rules examination (for employees other than company representatives or operations supervisors) shall pay a nonrefundable fee of \$40 before taking any such examination.

(C) The examination fees are nonrefundable and, if an applicant fails an examination, the applicant shall pay the full examination fee for each subsequent examination.

(2) Each individual who performs CNG activities as an employee of an ultimate consumer or a state agency, county, municipality, school district, or other governmental subdivision shall be properly supervised by his or her employer. Any such individual who is not certified by AFRED to perform such CNG activities shall be properly trained by a competent person in the safe performance of such CNG activities.

(3) Each person wishing to submit to examination shall file a CNG Form 1016 with AFRED.

(4) An individual who has filed CNG Form 1016 and the applicable nonrefundable examination fee may take the rules examination at the Commission's AFRED Training Center, 6506 Bolm Road, Austin, Texas, between the hours of 8:00 a.m. and 12:00 noon, Monday through Friday, except for

state holidays, and at other designated times and locations around the state. Tuesdays and Thursdays are the preferred days for examinations at the AFRED Training Center. Dates and locations of available Commission CNG examinations may be obtained in the Austin offices of AFRED and on the Commission's web site at www.rrc.state.tx.us, and shall be updated at least monthly. Examinations shall be conducted in Austin and in other locations around the state. Individuals or companies may request in writing that examinations be given in their area. AFRED shall schedule its examinations and locations at its discretion.

(5) Within 15 days of the date an individual takes an examination, AFRED shall notify the individual of the results of the examination.

(A) If the examination is graded or reviewed by a testing service, AFRED shall notify the individual of the examination results within 14 days of the date AFRED receives the results from the testing service. If the notice of the examination results will be delayed for longer than 90 days after the examination date, AFRED shall notify the individual of the reason for the delay before the 90th day. AFRED may require a testing service to notify an individual of the individual's examination results.

(B) Successful completion of any required examination shall be credited to and accrue to the individual.

(C) Any individual who fails an examination shall be immediately disqualified from performing any CNG related activities covered by the

examination. Any individual who fails an examination administered by AFRED at the Austin location only may retake the same examination only one additional time during a business day. Any subsequent examinations shall be taken on another business day, unless approved by the AFRED director. If requested by an individual who failed the examination, AFRED shall furnish the individual with an analysis of the individual's performance on the examination.

(6) Time limits.

(A) Effective June 1, 2008, an applicant shall complete the examination within two hours.

(B) The examination proctor shall be the official timekeeper.

(C) An examinee shall submit the examination and the answer sheet to the examination proctor before or at the end of the established time limit for an examination.

(D) The examination proctor shall mark any answer sheet that was not completed within the time limit.

(b) General installers and repairmen exemption.

(1) Any individual who is currently licensed as a master or journeyman plumber by the Texas State Board of Plumbing Examiners or who is currently licensed with a Class A or B air conditioning and refrigeration contractors license issued by the Department of Licensing and Regulation may apply for and be granted an exemption to the Category 2 and 3 service and installation employee examination requirements by submitting to AFRED the following information:

(A) CNG Form 1016B;

(B) a \$30 original filing fee; and

(C) any information AFRED may reasonably require.

(2) This exemption does not become effective until the examination exemption card is issued by AFRED.

(3) The examination exemption accrues to the individual and is nontransferable.

(4) Any individual granted such exemption shall maintain certified status at all times. Upon failure to maintain certified status, all affected CNG operations shall cease immediately until proper status has been regained.

(5) In order to maintain an exemption, each individual issued an examination exemption card shall pay a \$20 annual renewal fee to AFRED on or before May 31 of each year. Failure to pay the annual renewal fee by May 31 shall result in a lapsed exemption. If an individual's exemption lapses, that individual shall cease performing all CNG related activities granted by this exemption until that individual renews the exemption. To renew a lapsed exemption, the individual shall pay the \$20 annual renewal fee plus a

\$20 late-filing fee. Failure to do so shall result in the expiration of the examination exemption. If the individual's examination exemption has been expired for one year or longer, the individual shall complete all requirements necessary to apply for a new exemption.

(6) Any individual who is issued this exemption agrees to comply with the current edition of the regulations for compressed natural gas. In the event the exempt individual surrenders, fails to renew, or has the license revoked either by the Texas State Board of Plumbing Examiners or Texas Department of Licensing and Regulation, that individual shall immediately cease performing any CNG activity granted by this section. The examination exemption card shall be returned immediately to AFRED and all rights and privileges surrendered.

(c) Trainees.

(1) A licensee or ultimate consumer may employ an individual as a trainee for a period not to exceed 45 calendar days without that individual having successfully completed the rules examination subject to the following conditions.

(A) The trainee shall be directly and individually supervised at all times by an individual who has successfully completed the rules examination for the areas of work being performed by the trainee.

(B) The licensee or ultimate consumer shall ensure that CNG Form 1016 is on file with AFRED for each trainee at the time that trainee begins supervised CNG activities. The trainee shall then have 45 calendar days to pass the applicable rules examination.

(2) A trainee who fails the rules examination shall immediately cease to perform any CNG related activities covered by the examination failed.

(3) A trainee who has been in training for a total of 45 calendar days, in any combination and with any number of employers, shall cease to perform any CNG activities for which he or she is not certified.

(d) Renewal of certified status.

(1) AFRED shall notify licensees of any employees' pending renewals, or shall notify the individual if not employed by a licensee, in writing, at the address on file with AFRED no later than March 15 of a year for the May 31 renewal date of that year.

(2) In order to maintain active status, a certificate holder shall pay the \$25 annual certificate renewal fee to AFRED on or before May 31 of each year. Individuals who hold more than one certificate shall pay only one annual renewal fee.

(3) Failure to pay the annual renewal fee by the deadline shall result in a lapse of certification unless the late filing fee in paragraph (4) of this subsection is paid. If an individual's certification has been expired for one year or longer, that individual shall comply with the requirements of subsection (a) of

this section. If an individual's certification lapses or expires, that individual shall immediately cease performance of any CNG activities that require certification. Certified status shall be regained only by successfully completing the examination requirement for certification and meeting the requirements of paragraph (4) of this subsection.

(4) Any lapsed renewals submitted after May 31st of each year shall include a \$20 late filing fee in addition to the renewal fee, proof of successful completion of the examination required for certification, and be received in AFRED's Austin office no later than close of business on August 31 or, if August 31 falls on a weekend or state holiday, close of business on the last business day before August 31 of each year. Upon receipt of the renewal fee and late filing penalty, AFRED shall verify that the individual's certification has not been suspended, revoked, or expired for one year or longer. After verification, AFRED shall renew the certification and the individual may resume CNG activities.

(e) Expired certification(s). Any renewal submitted after the August 31 deadline shall be considered expired. If an individual wishes to renew a certification that has been expired for less than one year, that individual shall submit the annual renewal fee and late filing fee, and proof of successful completion of the examination required for certification. Upon verification that the individual's certification has not been suspended, revoked, or expired for one year or longer, AFRED shall renew the individual's certification and the individual may resume CNG activities.

The provisions of this §13.70 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective October 15, 1993, 18 TexReg 6457; amended to be effective August 30, 1999, 24 TexReg 6733; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 9, 2003, 28 TexReg 4416; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective October 29, 2007, 32 TexReg 7677; amended to be effective February 1, 2008, 33 TexReg 141; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.71. Hearings for Denial, Suspension, or Revocation of Licenses or Certifications.

(a) The Commission may deny, suspend, or revoke a license or certificate for any individual who fails to comply with this chapter.

(1) If LP-Gas Operations determines that an applicant for license, certificate, or license renewal has not met the requirements of this chapter, LP-Gas Operations shall notify the applicant in writing of the reasons for the proposed denial. In the case of an applicant for license or certificate, the notice shall

advise the applicant that the application may be resubmitted within 30 calendar days of receipt of the denial with all cited deficiencies corrected, or, if the applicant disagrees with LP-Gas Operations' determination, the applicant may request a hearing in writing on the matter within 30 calendar days of receipt of the notice of denial.

(2) If the applicant resubmits the application for license or license renewal within 30 days of receipt of the denial with all deficiencies corrected, LP-Gas Operations shall issue the license or license renewal.

(b) Hearing regarding denial of license or license renewal.

(1) An applicant receiving a notice of denial of a license or license renewal may request a hearing to determine whether the applicant did comply in all respects with the requirements for the category or categories of license sought. The request for hearing must be in writing, must refer to the specific requirements the applicant claims were met, and must be received in the Commission's Austin office within 30 days of the applicant's receipt of the notification of denial.

(2) Upon receipt of a request complying with paragraph (1) of this subsection, LP-Gas Operations shall forward the request for a hearing to the Office of General Counsel for the purpose of scheduling a hearing within 30 calendar days following the receipt of the request for hearing to determine the applicant's compliance or noncompliance with the licensing requirements for the category or categories of license sought.

(3) If, after hearing, the Commission finds the applicant's claim has been supported, the Commission may enter an order in its records to that effect, noting the category or categories of license for which the applicant is entitled to be licensed, and the license(s) or renewal(s) shall be issued.

(4) If, after hearing, the Commission finds that the applicant is not qualified for the license or license renewal in the category or categories of license sought, the Commission may enter an order in its records to that effect, and no license or renewal may be issued to the applicant.

(c) Suspension and revocation of licenses and certifications.

(1) If LP-Gas Operations finds by means including, but not limited to, inspection, review of required documents submitted, or complaint by a member of the general public or any other person, a probable or actual violation of or noncompliance with the Texas Natural Resources Code, Chapter 116, or this chapter, LP-Gas Operations shall notify the licensee or certified person of the alleged violation or noncompliance in writing.

(2) The notice shall specify the acts, omissions, or conduct constituting the alleged violation or noncompliance and shall designate a date not less than 30 calendar days or more than 45 calendar days after the licensee or certified person receives the notice by which the violation or noncompliance must be corrected or discontinued. If LP-Gas Operations determines the violation or noncompliance may pose imminent peril to the health, safety, or welfare of the general public, LP-Gas Operations may notify the licensee or certified person orally with instruction to immediately cease the violation or noncompliance. When oral notice is given, LP-Gas Operations shall follow it with written notification no later than five business days after the oral notification.

(3) The licensee or certified person shall either report the correction or discontinuance of the violation or noncompliance within the time frame specified in the notice or request an extension of time in which to comply. The request for extension of the time to comply must be received by LP-Gas Operations within the same time frame specified in the notice for correction or discontinuance.

(d) Hearing regarding suspension or revocation of licenses and certifications.

(1) If a licensee or certified individual disagrees with the determination of LP-Gas Operations under this section, that licensee or certified individual may request a public hearing on the matter to be conducted in compliance with the Texas Government Code, Chapter 2001, Chapter 1 of this title (relating to Practice and Procedure), and any other applicable rules. The request shall be in writing, shall refer to the specific rules or statutes the licensee or certified individual claims were met, and shall be received by LP-Gas Operations within 30 calendar days of the licensee's or certified individual's receipt of the notice of violation or noncompliance.

(2) If, after hearing, the Commission finds that the licensee or certified individual may not comply within the specified time, the Railroad Commission of Texas may enter an order calling a public hearing to be conducted in compliance with the Texas Government Code, Chapter 2001, the general rules of practice and procedure of the Railroad Commission of Texas in Chapter 1 of this title, and any other applicable rules.

The provisions of this §13.71 adopted to be effective October 15, 1993, 18 TexReg 6457; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.72. Designation of Operations Supervisor (Branch Manager).

(a) The commission shall designate whether a site is an outlet for the purpose of this chapter. Criteria

used by the commission in determining the designation of an outlet includes, but is not limited to:

(1) distance from other CNG activities operated by the licensee;

(2) whether the operation is a duplicate of the home office operation; and

(3) whether the operation is directly supervised on a routine basis.

(b) A licensee maintaining more than one outlet shall file CNG Form 1001A with LP-Gas Operations designating an operations supervisor (branch manager) at each outlet. The operations supervisor shall pass the management examination as administered by AFRED before commencing or continuing the licensee's operations at the outlet.

(c) An operations supervisor (branch manager) may be a company representative of the licensee; however, unless specific approval is granted by LP-Gas Operations, an individual may be designated as an operations supervisor (branch manager) at each outlet.

(d) The operations supervisor (branch manager) shall be directly responsible for actively supervising CNG operations of the licensee at the designated outlet.

The provisions of this §13.72 adopted to be effective June 13, 1995, 20 TexReg 3984; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.73. Employee Transfers. A licensee, an ultimate consumer, or a state agency, county, municipality, school district, or other governmental subdivision shall notify AFRED when a previously certified person is hired, by filing CNG Form 1016A along with a \$10 filing fee. Notification must include the employee's name as recorded on a current driver's license or Texas Department of Public Safety identification card, employee social security number, name of previous and new licensee-employer, and types of CNG work to be performed by the newly-hired certified employee. A state agency, county, municipality, school district, or other governmental subdivision is exempt from this subsection if such entity chooses not to certify its employees who perform CNG activities.

The provisions of this §13.73 adopted to be effective August 30, 1999, 24 TexReg 6733; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective February 1, 2008, 33 TexReg 141.

§13.75. Franchise Tax Certification and Assumed Name Certificate.

(a) An applicant for an original or renewal license that is a corporation or limited liability company shall be in good standing with the Comptroller of Public Accounts. An original license applicant shall provide a

copy of the Franchise Tax Statement from the Comptroller of Public Accounts showing "In Good Standing."

(b) Any applicant for license must list all names on CNG Form 1001 under which CNG related activities requiring licensing are to be conducted. Any company performing CNG activities under an assumed name (dba) must file with LP-Gas Operations copies of the assumed name certificates which are required to be filed with the respective county clerk's office and/or the Office of the Secretary of State.

The provisions of this §13.75 adopted to be effective October 15, 1993, 18 TexReg 6458; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.80. Requests for CNG Classes. Requests for Commission staff to conduct a CNG training class for CNG activities under the Commission's jurisdiction shall be submitted to the AFRED training section. The AFRED training section may conduct the requested class at its discretion. The nonrefundable fee for a CNG training class is \$250 if no overnight expenses are incurred by the AFRED training section, or \$500 if overnight expenses are incurred. AFRED may waive the class fee in cases where the Commission recovers the cost of the class from another source, such as a grant.

The provisions of this §13.80 adopted to be effective June 5, 2006, 31 TexReg 4604.

SUBCHAPTER D. CNG COMPRESSION, STORAGE, AND DISPENSING SYSTEMS

§13.91. Applicability. This subchapter applies to the design, construction, installation, and operation of cylinders, pressure vessels, compression equipment, buildings and structures, and associated equipment used for storage and dispensing of compressed natural gas (CNG) as an engine fuel in fleet and automatic dispensing operations.

The provisions of this §13.91 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.92. System Component Qualification. System components shall comply with the appropriate provisions in Subchapter B of this chapter (relating to General Rules for Compressed Natural Gas (CNG) Equipment Qualifications).

The provisions of this §13.92 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 5, 2006, 31 TexReg 4604.

§13.93. General.

(a) Equipment related to a compression, storage, or dispensing installation, excluding automatic

dispensers and residential fueling facilities, shall be protected from tampering and damage and the protection shall be maintained in good condition at all times and in accordance with one of the three standards set forth in paragraphs (1) - (3) of this subsection. Automatic dispensers for general public use shall be protected against collision damage in accordance with subsection (d) of this section.

(1) Fencing.

(A) Fencing material shall be chain link type with wire no smaller than 12-1/2 American wire gauge size.

(B) Fencing shall be no less than six feet in height at all points. Fencing may be five feet in height when topped with at least three strands of barbed wire, with the strands no more than four inches apart.

(C) All uprights, braces, and/or cornerposts shall be composed of noncombustible material if located within distances for sources of ignition or combustible materials required in Table 1 of §13.94 of this title (relating to Location of Installations) of the enclosed CNG transfer system(s) or CNG cylinder(s).

(D) All fenced enclosures shall have at least one gate suitable for ingress and egress. All gates shall be locked whenever the area enclosed is unattended.

(E) A minimum clearance of two feet shall be maintained between the fencing and the compression equipment, cylinder cascade(s), or container(s), and the entire dispensing system(s).

(F) Fencing which is located more than 25 feet from any point of a CNG dispensing system(s), container(s), or compression equipment is designated as perimeter fencing. If a CNG dispensing system(s), cylinder cascade(s), or compression equipment is located inside perimeter fencing and is subject to vehicular traffic, it shall be protected against damage according to the specifications set forth in paragraph (2) of this subsection.

(G) The cylinder cascade containers, compression equipment, and the entire dispensing system must be completely enclosed by fencing.

(2) Guardrails.

(A) Where fencing is not used to protect the installation as provided in paragraph (1) of this subsection, then valve locks, a means of locking the electric control for the compressor(s), or other suitable means shall be provided to prevent unauthorized withdrawal of CNG.

(B) Vertical supports for guardrails shall be a minimum of three-inch Schedule 40 steel pipe, or material with equal or greater strength. The vertical supports must be capped on the top and anchored below the ground a minimum of 18 inches in concrete,

with a minimum height of 30 inches above the ground. Supports shall be spaced no more than four feet apart.

(C) The top of the horizontal guardrailing shall be secured to the vertical supports a minimum of 30 inches above the ground. The horizontal guardrailing shall be no less than three-inch Schedule 40 steel pipe, or material with equal or greater strength. The horizontal guardrailing shall be welded or bolted to the vertical supports with bolts of sufficient size and strength to prevent displacement of the horizontal guardrailing.

(D) No opening in the horizontal guardrailing may exceed 36 inches. A means of temporarily removing the guardrailing and/or vertical supports to facilitate the handling of heavy compression equipment may be incorporated into the horizontal guardrailing and vertical supports. In no case shall the protection provided by the guardrailing and vertical supports be decreased.

(E) A minimum clearance of 24 inches shall be maintained between the railing and any part of the CNG compression equipment, cylinder cascade(s), container(s), or dispensing equipment.

(F) The operating end of the container(s) and any part of the CNG compression equipment, piping, or cylinder cascade(s) which is exposed to vehicular traffic must be protected from damage by the vehicular traffic. The protection shall extend at least 24 inches beyond any part of the CNG compression equipment, cylinder cascade(s), container(s), or dispensing equipment which is exposed to vehicular traffic.

(3) Protection. Each automatic dispenser shall be secured to a concrete island a minimum of six inches above the normal grade and two inches above the grade of any other fuel dispenser(s). Each automatic dispenser shall be protected against collision damage. Support columns or other such protection installed at the approach end(s) of the concrete island shall prevent collision with the automatic dispenser. If such protection cannot be provided, then the requirements of paragraph (2) of this subsection shall apply.

(4) Fencing and guardrails. A combination of the protection standards authorized by paragraphs (1) and (2) of this subsection shall not result in less protection than either standard.

(5) The provisions of this section notwithstanding, LP-Gas Operations may require an installation to be protected in accordance with subsection (a) of this section when evidence exists that because of exceptional circumstances, added safeguards are needed to adequately protect the health, safety, and welfare of the general public. If a person owning or operating such an installation disagrees with the determination of LP-Gas Operations made under

this subsection, then that person may request a public hearing on the matter. However, until a determination is issued subsequent to a hearing on the matter, the subject automatic dispenser(s) shall be either protected in the manner described by LP-Gas Operations or removed from CNG service and/or all of the product withdrawn from it.

(b) Control devices shall be designed and installed so that internal or external icing or hydrate formation will not cause a malfunction.

(c) Authorized automatic dispenser(s) shall comply with §13.25(k) of this title (relating to Filings Required for Stationary CNG Installations). Existing dispensers may be modified, provided the modifications include only those components listed as approved by a laboratory as discussed in §13.25(k) of this title, and are installed in a workmanlike manner in accordance with industry standards.

(d) The authorized automatic dispenser shall have the following features.

(1) A key, card, or code system shall be used.

(2) All appurtenances, metering equipment, and other related equipment installed on an automatic dispenser shall meet all applicable requirements of the rules in this chapter.

(3) All dispensing equipment shall be fabricated of material suitable for CNG, and resistant to the action of CNG under service conditions. Pressure containing parts shall be of steel, ductile iron, forged steel, brass, or an equivalent material. Aluminum may be used for approved meters. All piping shall be Schedule 80, and all pipe fittings shall be forged steel stamped 6,000 psi or greater.

(4) The automatic dispensing system shall incorporate a cutoff valve with an opening and closing device which ensures the valve is in a closed position when the dispenser is deactivated.

(5) A device shall be installed in the CNG piping in such a manner that displacement of the dispenser will result in the displacement of such piping on the downstream side of the device.

(6) The transfer hose on an automatic dispenser shall incorporate a pull-away device. The pull-away device shall be installed so as to separate by a force not greater than 45 pounds when applied in any horizontal direction. The device shall stop the flow of CNG in the event of a separation.

(7) All electric installations within the automatic dispenser enclosure and the entire pit or open space beneath the dispenser shall comply with the National Electric Code, Class 1, Group D, Division 2, except for dispenser components located at least 48 inches above the dispenser base which are intrinsically safe according to the National Electric Code.

(8) The fueling connector shall be compatible with the fueling connection of the vehicle as specified

in §13.34 of this title (relating to Vehicle Fueling Connection). The fueling connector shall have the following safety features:

- (A) remote vapor discharge;
- (B) a manual shut-off valve.

(e) All CNG storage installations, and installations protected by guardrails only, must comply with the sign and/or lettering requirements of Table 1 of this section.

SIGNS/LETTERING

Requirements	Automatic Dispenser/Refueling Area ⁵	Fueling Connection Receptacle CNG Fueled Vehicle	Engine Compartment of CNG Fueled Vehicle	Emergency Shutdown Devices	Compression Area ⁵
1. Signs with Red Letters at Least 2 Inches High, on White Background - NO SMOKING ¹	■				■
2. Sign with Red Letters at Least 4 Inches High, on White Background: WARNING-FLAMMABLE GAS; Black letters: NO TRESPASSING					■
3. Letters at Least 2 Inches High: NATURAL GAS	■ ⁷				■
4. CNG FUELED VEHICLE		■ ²	■		
5. System Working Pressure _____		■ ²	■		
6. Name of Licensee and License Number			■		

7. Cylinder Retest Date(s) or Expiration Date(s) ³		■ ²	■		
8. Total Cylinder Water Volume in Gallons			■		
9. Sign with White Letters at Least 2 Inches High on Red Background: CNG EMERGENCY VALVE; PUSH				■ ⁴	
10. Letters at Least 4 Inches High: Name of Licensee Operating Installation	■ ⁶				■ ⁶

NOTES TO §13.93, TABLE 1

1. Location of sign shall be determined by on-site conditions, but shall be visible from each point of transfer.
2. On durable label, readily visible. Information in items 4, 5, 6, 7, 8 may be combined on one label.
3. When applicable.
4. Devices shall be distinctly marked for easy recognition with permanently affixed, legible sign.
5. Does not apply to residential/refueling facility.
6. One sign may be installed at either location.
7. On each operating side of dispenser.

The provisions of this §13.93 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.94. Location of Installations.

(a) Compressed natural gas (CNG) compression, storage, and dispensing shall be located and conducted outdoors.

(b) A facility in which CNG compression, storage, and dispensing equipment is sheltered by a canopy-type structure constructed of noncombustible materials which has at least one side open and a roof designed for ventilation and dispersal of escaped gas shall be regarded as in compliance, provided that a ventilation

space 12 inches wide is provided along the full length at the top of three sides.

(c) Compressed natural gas (CNG) storage cylinders charged with CNG not connected for use shall be located outdoors in a fenced, protected area. Each cylinder must be equipped with a valve cap or guard securely tightened.

(d) Compression, storage, and dispensing equipment shall be located aboveground and installed according to the distances specified in Table 1 of this section. The compression, storage, and dispensing equipment shall not be placed in any area directly beneath an electric transmission or distribution line(s) (excluding a customer service line) and that area which is six feet to either side of the line. If this distance is

not adequate to prevent the broken ends of the electric transmission or distribution line(s) and voltage from contacting the CNG equipment in the event of breakage of any conductor, then other suitable means of protection designed and constructed so as to prevent such contact with the equipment may be used if approved by LP-Gas Operations prior to installation. The request for approval must be in writing and specify the manner in which the equipment will be protected from contact, including specifications for materials used. If approval is not granted, the equipment must be located the distance required by this section from the transmission line to prevent such contact.

MINIMUM DISTANCE REQUIREMENTS FOR CNG INSTALLATIONS

	Compression Equipment	Dispensing Equipment ¹	Storage Cylinders or Cascades	Point of Transfer
1. Nearest Building ²	10 feet	10 feet	10 feet	10 feet
2. Nearest Building Opening	10 feet	10 feet	10 feet	10 feet
3. Nearest Public Street, Sidewalk line, Roadway, Adjoining Property Line	10 feet	10 feet	10 feet	10 feet
4. Nearest rail of any railroad main track	50 feet	50 feet	50 feet	50 feet
5. Source of ignition/combustible material ³	10 feet	10 feet	10 feet	10 feet
6. Above ground tanks containing flammable or combustible liquid	N/A	N/A	20 feet	20 feet
7. Manufactured housing	N/A	N/A	N/A	10 feet
8. Other CNG automatic dispensers or dispensers of flammable fuel	N/A	3 feet	N/A	N/A

NOTES TO §13.94, TABLE 1

1. Includes automatic dispensers.

2 Upon approval by the commission, equipment may be located a lesser distance from buildings or walls constructed of concrete or other noncombustible materials. This exception does not apply to building openings.

3 Source of ignition includes, but is not limited to, an open flame, open light switch, all smoking materials, pilot lights, and non explosion proof lights. Combustible materials include, but are not limited to, trash, weeds, and wood.

N/A = Not applicable

(e) A clear space of at least three feet shall be provided for access to all valves and fittings of multiple groups of cylinders.

(f) Vehicles shall not be considered a source of ignition with respect to the provisions of this chapter. Exception: Vehicles containing fuel-fired equipment (e.g., recreational vehicles and catering trucks) shall be considered a source of ignition unless this equipment is shut off completely before entering an area in which ignition sources are prohibited.

The provisions of this §13.94 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.95. Installation of Cylinders and Cylinder Appurtenances.

(a) Storage cylinders shall be installed aboveground on stable, noncombustible foundations. Horizontal cylinders shall have no more than two points of support longitudinally. Where flooding may occur, they shall be securely anchored to prevent floating.

(b) Cylinders shall be protected by painting or other equivalent means where necessary to inhibit corrosion. Horizontally installed cylinders shall not be in direct contact with each other.

(c) All external steel surfaces on cylinders subjected to direct or indirect sunlight or heat shall be painted white.

(d) A means shall be provided to prevent the flow or accumulation of flammable or combustible liquids under cylinders, such as be grading, pads, or diversion curbs.

The provisions of this §13.95 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.96. Installation of Pressure Relief Devices.

(a) Pressure relief valves shall be so arranged that they will discharge to a safe area, and so that escaping gas will not impinge upon buildings, other equipment, or areas that could be occupied by the public.

(b) A pressure relief device shall be provided in the transfer system to prevent overpressure in the vehicle.

The provisions of this §13.96 adopted to be effective November 15, 1990, 15 TexReg 5941.

§13.97. Installation of Pressure Regulators. Regulators shall be designed, installed, or protected so their operation will not be affected by the elements (freezing rain, sleet, snow, ice, mud, or debris). The protection may be integral with the regulator.

The provisions of this §13.97 adopted to be effective November 15, 1990, 15 TexReg 5941.

§13.98. Installation of Pressure Gauges. Gauges shall be installed to indicate compression discharge pressure, storage pressure, and fuel supply cylinder fill pressure.

The provisions of this §13.98 adopted to be effective November 15, 1990, 15 TexReg 5941.

§13.99. Installation of Piping and Hoses.

(a) Piping and tubing shall be installed with adequate provisions for expansion, contraction, jarring, vibration, and settling.

(b) All exterior piping installed underground shall be installed with a minimum of 18 inches of cover unless it is located beneath driveways, roads, or streets. If the piping is installed beneath driveways, roads, or streets, it shall be buried at a depth to prevent damage from vehicular traffic or encased in steel pipe or bridged (shielded). The 18-inch cover may be reduced to 12 inches if external damage to the piping is not likely to result (e.g., piping is under a lawn area not subjected to traffic). If a minimum of 12 inches of cover cannot be maintained, the pipe shall be encased in steel pipe or bridged (shielded) or protected against mechanical injury by means of curbs, slabs, substantial posts, or other suitable means.

(1) All underground piping shall be installed with sufficient clearance from any other underground structure, and to protect against damage from proximity to other structures.

(2) Underground piping shall be protected from corrosion in compliance with industry recognized practices.

(3) Uncoated threaded or socket-welded joints shall not be used in piping in contact with soil or where internal or external crevice corrosion may occur.

(c) The use of hose in an installation is limited to:

(1) a vehicle fueling hose; and

(2) a section of metallic reinforced hose not exceeding 36 inches in length to provide flexibility where necessary. Each section shall be installed so as to be protected against mechanical damage and be readily visible for inspection. The manufacturer's identification shall be retained in each section.

The provisions of this §13.99 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.100. Testing.

(a) Piping, tubing, hoses, and hose assemblies shall be leak-tested after assembly to prove free from leaks at a pressure equal to at least the normal operating pressure of that portion of the system.

(b) Pressure relief valves shall be tested in accordance with the manufacturer's instructions.

The provisions of this §13.100 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.101. Installation of Emergency Shutdown Equipment.

(a) Manually operated cylinder valves shall be provided for each cylinder.

(b) A manually operated shutoff valve shall be installed in a manifold as close to a cylinder or group of cylinders as practical.

(c) Where excess flow check valves are used, the closing flow shall be less than the flow rating of the piping system which would result from a pipeline

rupture between the excess flow valve and the equipment downstream of the excess flow check valve.

(d) The fill line on storage cylinders shall be equipped with a backflow check valve to prevent discharge of natural gas from the cylinder in case of line, hose, or fittings rupture.

(e) Device(s) for emergency shutdown of the compression and dispensing equipment shall be provided at a location remote from the dispensing area. The device(s) shall operate to activate a valve installed at the compression and dispensing area that when activated shuts off the power and gas supply to the compressor(s) and dispenser(s). The emergency shutdown device(s) shall be visible from the dispensing area(s).

(f) Emergency gas shutdown devices(s) shall be distinctly marked for easy recognition according to the requirements of Table 1 of §13.93 of this title (relating to General).

(g) Break-away protection shall be provided in a manner such that, in the event of a pull-away, natural gas will cease to flow at any separation.

The provisions of this §13.101 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.102. Installation of Electrical Equipment.

(a) Electrical installations located within the vicinity of any compressor, cascade, or dispensing equipment shall be in accordance with the National Electrical Code (NEC) for Class 1, Group D: Hazardous Locations, Division 2 area. A Division 2 area is where combustible gases are present only under abnormal conditions. This requirement does not apply to residential installations, including manufactured housing. The classified area shall not extend beyond an unpierced wall, roof, or vapor tight partition. The vicinity of any compressor, cascade, or dispensing equipment is that area indicated by the following chart.

Installation of Electrical Equipment

Location	Division	Extent of Classified Area
Containers (other than mounted fuel supply containers)	2	Within 10 feet of container
Area containing compression and ancillary equipment	2	Up to 15 feet from equipment
Dispensing equipment outdoors	2	Inside dispenser cabinet

Outdoors	2	From 0 to 20 feet from the dispenser
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(b) Electrical equipment installed on internal combustion engines for stationary installations shall comply with NEC for Class 1, Group D, Division 2 locations.

The provisions of this §13.102 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective October 15, 1993, 18 TexReg 6458; amended to be effective June 5, 2006, 31 TexReg 4604.

§13.103. Stray or Impressed Currents and Bonding.

(a) When stray or impressed currents are used or may be present on dispensing systems (such as cathodic protection), protective measures to prevent ignition shall be taken in accordance with "Protection Against Ignitions Arising Out of Static, Lighting, and Stray Currents, American Petroleum Institute RP 2003."

(b) Static protection is not required when compressed natural gas (CNG) is loaded or unloaded by conductive or nonconductive hose, flexible metallic tubing, or pipe connections where both halves of the metallic couplings are in contact.

The provisions of this §13.103 adopted to be effective November 15, 1990, 15 TexReg 5941.

§13.104. Operation.

(a) A cylinder shall not be charged in excess of the maximum allowable working pressure at normal temperature for that container. Department of Transportation (DOT) cylinders shall be charged in accordance with DOT regulations. DOT cylinders shall not be subjected to pressure in excess of 125% of the marked service pressure even if upon cooling it settles to the marked service pressure.

(b) A fuel supply cylinder shall not have a settled pressure above the working pressure stamped on the cylinder and displayed on a label near the filling connection, corrected for the ambient temperature at time of filling.

(c) Compressed natural gas (CNG) dispensing systems shall be equipped to automatically stop fuel flow when a fuel supply cylinder reaches the temperature corrected fill pressure.

(d) When CNG is being transferred to or from a motor vehicle, the engine shall be stopped.

(e) Each CNG transport shall carry no fewer than two chock blocks designed to effectively prevent the rolling of the transport. These blocks shall be used any time the transport is parked and during the transfer of fuel regardless of the level of the surrounding terrain.

(f) Bleed connections shall be provided in transfer systems to permit depressurizing before disconnecting the line. These bleed connections shall lead to a safe point of discharge.

(g) Compressed natural gas (CNG) shall not be used to operate any device or equipment which has not been designed or properly modified for CNG service.

(h) Sources of ignition shall not be permitted within ten feet of any filling connection during a transfer operation.

(i) Fuel dispenser(s), including automatic dispenser(s), may be operated only by an individual who has been properly trained.

(1) Any consumer who operates an automatic dispenser shall be provided with written instructions and safe operating procedures by the licensee. The consumer should be cautioned to study and preserve such instructions and procedures, and to educate all those with access to the automatic dispenser(s) in the proper operating procedures. Each licensee shall maintain a current list of all entities and/or individuals trained by the licensee in the operation of an automatic dispenser.

(2) Step-by-step operating instructions provided by the manufacturer shall be posted at or on each automatic dispenser, readily visible to the operator during transfer operations. The instructions shall describe each action necessary to operate the automatic dispenser.

(3) Each person or entity who operates a fuel dispenser, excluding an automatic dispenser, shall be provided with written instructions and safe operating procedures by the licensee. The person operating the dispenser should be cautioned to study and preserve such instructions and procedures.

The provisions of this §13.104 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.105. Fire Protection. A portable fire extinguisher having a rating not less than 20-B:C shall be provided at each automatic dispensing or refueling area in an accessible location remote from the dispensing area and the compressor.

The provisions of this §13.105 adopted to be effective November 15, 1990, 15 TexReg 5941; amended to be effective June 1, 1994, 19 TexReg 3170.

§13.106. Maintenance.

(a) Cylinders and their appurtenances, piping systems, compression equipment, controls, vehicle

fueling hose(s), and devices shall be maintained in proper operating condition at all times.

(b) While in transit, fueling hose and flexible metal hose on a cargo vehicle to be used in a transfer operation, including their connections, shall be depressurized and protected from wear and injury.

(c) Pressure relief valves shall be maintained in proper operating condition.

(d) As a precaution to keep pressure relief devices in reliable operating condition, care shall be taken in the handling or storing of compressed natural gas (CNG) cylinders to avoid damage. Care shall also be exercised to avoid plugging by paint or other dirt accumulation of pressure relief device channels or other parts which could interfere with the functioning of the device.

The provisions of this §13.106 adopted to be effective November 15, 1990, 15 TexReg 5941.

§13.107. Dispenser Accuracy. Each retail compressed natural gas (CNG) dispenser shall comply with the applicable weights and measures requirements of the Texas Department of Agriculture, relating to dispensing accuracy.

The provisions of this §13.107 adopted to be effective November 15, 1990, 15 TexReg 5941.

SUBCHAPTER E. ENGINE FUEL SYSTEMS

§13.131. Applicability.

(a) This subchapter applies to the design, installation, inspection, and testing of compressed natural gas (CNG) fuel supply systems for vehicular internal combustion engines.

(b) Installation of each component of the system shall be made in conformance to the written instructions provided by the manufacturer.

The provisions of this §13.131 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.132. System Component Qualification.

(a) System components shall comply with the appropriate provisions in Subchapter B of this chapter (relating to General Rules for Compressed Natural Gas (CNG) Equipment Qualifications).

(b) Components in the engine compartment shall be suitable for service over a range of temperatures from -40 degrees Fahrenheit to 250 degrees Fahrenheit. All other components shall be suitable for service over a range from -40 degrees Fahrenheit to 180 degrees Fahrenheit.

(c) Fuel-carrying components shall be labeled or stamped with the following:

- (1) the manufacturer's name or symbol;
- (2) the model designation;
- (3) the design working pressure;

(4) the direction of fuel flow when necessary for correct installation; and

(5) the capacity or electrical rating.

(d) Subsection (c) of this section shall not apply to service valves, tubing, and fittings, or to hose, metallic hose, or flexible metal hose used as specified in §13.32(e) and (f) of this title (relating to Hose and Hose Connections).

The provisions of this §13.132 adopted to be effective November 15, 1990, 15 TexReg 5945; amended to be effective August 9, 1995, 20 TexReg 5500.

§13.133. Installation of Fuel Supply Cylinders.

(a) Fuel supply cylinders on vehicles other than school buses, mass transit, or other vehicles used in public transportation may be located within, below, or above the driver or passenger compartment, provided all connections to the cylinders are external to, or sealed and vented from those compartments.

(b) Fuel supply cylinders on school buses, mass transit, and other public transportation vehicles shall not be located above or within the driver or passenger compartment. The motor fuel containers installed on a special transit vehicle may be installed in the passenger compartment, provided it complies with subsection (a) of this section.

(c) Each fuel supply cylinder shall be mounted in a location to minimize damage from collision. No part of a cylinder or its appurtenances shall protrude beyond the sides or top of the vehicle at the point where it is installed.

(d) The fuel system shall be installed with as much road clearance as practical, but not less than the minimum road clearance of the vehicle when loaded to its gross vehicle weight rating. This minimum clearance shall be measured from the lowest part of the fuel system.

(e) No portion of a fuel supply cylinder or cylinder appurtenance shall be located ahead of the front axle or behind the rear bumper mounting face of a vehicle. Cylinder valves shall be protected from physical damage using the vehicle structure, valve protectors, or a suitable metal shield.

(f) Each cylinder bracket shall be secured to the vehicle body, bed, or frame with bolts, lock washers and nuts, or self-locking nuts of a size and strength capable of withstanding a static force in any direction of eight times the weight of a fully pressurized cylinder. The cylinder bracket shall be designed and manufactured by a cylinder manufacturer. Each specific mounting bracket manufactured on or after January 1, 1994, must have the manufacturer's name or logo on it in order to properly identify the bracket manufacturer. If self-locking nuts are installed, such nuts shall not be reused once they are removed. The

container mounting brackets shall prevent the container from jarring loose, slipping, or rotating.

(g) Each fuel supply cylinder shall be secured in the mounting brackets by bolts, lock washers and nuts, or self-locking nuts of a size and strength capable of withstanding a static force applied in any direction eight times the weight of the fully pressurized cylinder. If self-locking nuts are installed, such nuts shall not be reused once they are removed.

(h) The cylinder weight shall not be supported by the outlet, service valves, manifolds, or other fuel connections.

(i) Fuel supply cylinders located less than eight inches from the exhaust system shall be shielded against direct heat.

(j) The mounting system shall minimize fretting corrosion between the cylinder and the mounting system by means of rubber insulators or other suitable means.

(k) Fuel supply cylinders shall not be installed so as to adversely affect the driving characteristics of the vehicle.

(l) Containers shall be secured to a school bus, mass transit, or special transit vehicle frame (not the floor) by container fastenings or mounting brackets described in subsection (f) of this section. The fastenings or brackets must be secured to the frame or securely mounted to a supporting structure so as not to compromise the strength of that structure (i.e., backing plates or other acceptable means may be used to accomplish this purpose). Container(s) which are currently installed on school buses or mass transit vehicles by means of strap mounting brackets may continue to be used.

(m) The motor fuel container(s) installed on a school bus or mass transit vehicle shall be installed on the underside of the vehicle.

(n) If necessary, a plumbing chamber door shall be provided in the sidewall of the school bus, mass transit, or special transit vehicle 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.

The provisions of this §13.133 adopted to be effective November 15, 1990, 15 TexReg 5945; amended to be effective October 15, 1993, 18 TexReg 6459.

§13.134. Installation of Venting Systems.

(a) All pressure relief devices and pressure-carrying components installed within a closed compartment shall be vented to the outside of the vehicle in a suitable location.

(b) The venting system for the discharge of pressure relief devices (pressure relief device channels) shall be constructed in such a manner to channel the

natural gas out of the closed compartment. The vent collection bag shall be constructed from a fabric that is tear resistant, flame resistant, abrasion resistant, and inert with mechanical properties. The fabric shall be bonded to the cylinder and joints constructed using an adhesive compatible with the container fabric. This bag shall be repaired or replaced at any such time the bag fails to comply with the requirements of this subsection.

(c) The vent or vents for the venting system shall not exit into a wheel well.

(d) A vent shall not restrict the operation of a cylinder pressure relief device or pressure relief device channel.

The provisions of this §13.134 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.135. Installation of Piping.

(a) Manifolds connecting fuel cylinders shall be fabricated to minimize vibration and shall be installed in a protected location or shielded to prevent damage from unsecured objects.

(b) Pipe thread jointing material impervious to the action of CNG shall be applied to all male pipe threads prior to assembly.

(c) Piping and fittings shall be clear and free from cutting or threading burrs, and scaling. The ends of all piping shall be reamed.

(d) Where necessary to prevent abrasion, supply lines passing through a panel shall be protected by grommets or similar devices such as bulkhead fittings, which shall snugly fit both the supply lines and the holes in the panel.

(e) Supply lines shall either have at least eight inches' clearance from the engine exhaust system or shall be shielded against direct heat.

(f) Supply lines shall be mounted, braced, and supported to minimize vibration, and shall be protected against damage, corrosion, or breakage due to strain or wear. Supply lines shall be supported at least every 21 to 27 inches.

(g) Bends in piping or tubing are prohibited if such bends will weaken the pipe or tubing. Bends shall be made only with tools designed for this purpose.

(h) Joints or connections shall be located only in accessible locations.

(i) Hose, metallic hose, or flexible metal hose may be used in place of piping as specified in §13.32(e) and (f) of this title (relating to Hose and Hose Connections).

The provisions of this §13.135 adopted to be effective November 15, 1990, 15 TexReg 5945; amended to be effective August 9, 1995, 20 TexReg 5500.

§13.136. Installation of Valves.

(a) A manually or electronically operated cylinder service valve shall be installed on each fuel cylinder. Any electronically operated cylinder service valve shall incorporate in the design a means of manually closing the valve should the valve fail to close electronically.

(b) In addition to the cylinder service valve, a manual shutoff valve shall be installed in an accessible location which will permit isolation of the cylinder(s) from the remainder of the fuel system. Manual shutoff valves on school buses shall be installed on the exterior and as near as possible to the front entrance for immediate accessibility to the driver in case of emergency.

(c) The valve shall be securely mounted and shielded or installed in a protected location to minimize damage from vibration and unsecured objects.

(d) The valve location shall be marked with the words "Manual Shutoff Valve." Decals or stencils are acceptable.

(e) A means shall be provided in the system which automatically prevents the flow of gaseous fuel to the engine when the engine is not running even if the ignition is in an "on" position.

(f) When multiple fuel systems are installed on the vehicle, automatic valves shall be provided, as necessary, to shut off the fuel not being used.

(g) The fueling system shall be equipped with a backflow check valve which will prevent the return of gas from the cylinder to the filling connection.

The provisions of this §13.136 adopted to be effective November 15, 1990, 15 TexReg 5945; amended to be effective October 15, 1993, 18 TexReg 6459.

§13.137. Installation of Pressure Gauges.

(a) A pressure gauge located within a driver or passenger compartment shall be installed in such a manner that no gas will flow through the gauge in the event of failure. Such gauge when installed shall be readily visible from the driver's seat.

(b) A pressure gauge installed outside a driver or passenger compartment shall be equipped with a limiting orifice, a shatter-proof dial lens, and a body relief.

(c) Gauges shall be securely mounted, shielded, and installed in a protected location to prevent damage from vibration and unsecured objects.

The provisions of this §13.137 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.138. Installation of Pressure Regulators.

(a) An automatic pressure reducing regulator(s) shall be installed to reduce the fuel cylinder pressure to

a level consistent with the working pressure required by the gas-air mixer.

(b) Means shall be provided to prevent regulator malfunctions due to refrigeration effects.

(c) Regulators shall be installed so that their weight is not placed on, or supported by, the attached gas lines.

The provisions of this §13.138 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.139. Installation of Fueling Connection. A fueling connection receptacle complying with §13.34 of this title (relating to Vehicle Fueling Connection) shall be installed in each vehicle.

The provisions of this §13.139 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.140. Labeling.

(a) A vehicle equipped with a compressed natural gas (CNG) fuel system shall bear a durable label, readily visible and located at the fueling connection receptacle.

(b) The label shall include the following:

- (1) CNG fueled vehicle;
- (2) system working pressure;
- (3) name of company or entity and license number;
- (4) cylinder retest date(s) (where applicable);

and

- (5) total cylinder water volume in cubic inches.

(c) Each vehicle shall be identified with a weather-resistant diamond-shaped label located on an exterior vertical or near vertical surface on the lower right rear of the vehicle (on the trunk lid of a vehicle so equipped, but not on the bumper of any vehicle), inboard from any other markings. The label shall be approximately 4-3/4 inches by 3-1/4 inches. The marking shall consist of a border and the letters "CNG" (one inch minimum height centered in the diamond) of silver or white reflective luminous material on a blue background.

The provisions of this §13.140 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.141. System Testing.

(a) The complete assembly shall be leak tested using natural gas or inert gas (carbon dioxide or nitrogen, or a mixture of these).

(b) After installation, every connection shall be checked with a non-ammonia soap solution or a leak detector instrument after the equipment is connected and pressurized to its working pressure.

(c) If the completed assembly is leak tested with natural gas, the testing shall be done under adequately ventilated conditions.

(d) When a compressed natural gas (CNG) cylinder is involved in an accident or fire causing damage to the cylinder, the cylinder shall be replaced or removed and returned to a currently licensed Category 1 licensee (manufacturer) or Category 4 licensee (tester) to be inspected and retested in accordance with the originally manufactured specifications. Before being returned to service, a CNG Form 1008, Manufacturers Report of Retest or Repair, shall be sent to LP-Gas Operations.

(e) When a vehicle is involved in an accident or fire causing damage to any part of the CNG fuel system, the system shall be retested before being returned to service.

The provisions of this §13.141 adopted to be effective November 15, 1990, 15 TexReg 5945; amended to be effective October 22, 2001, 26 TexReg 8342; amended to be effective June 5, 2006, 31 TexReg 4604; amended to be effective December 24, 2012, 37 TexReg 9917.

§13.142. Maintenance and Repair.

(a) Damaged supply lines shall be replaced, not repaired.

(b) The owner or user, or both, shall maintain all cylinders, cylinder appurtenances, piping systems, venting systems, and other components in a safe condition.

(c) As a precaution to keep pressure relief devices in reliable operating condition, care shall be taken in the handling or storing of compressed natural gas (CNG) cylinders to avoid damage. Care shall also be exercised to avoid plugging by paint or other dirt accumulation of pressure relief device channels or other parts which could interfere with the functioning of the device.

(d) No repair or alteration will be permitted on pressure relief devices.

The provisions of this §13.142 adopted to be effective November 15, 1990, 15 TexReg 5945.

§13.143. Venting of CNG to the Atmosphere. All venting of CNG shall be done outdoors only under conditions that will result in rapid dispersion of the product being released. Consideration shall be given to such factors as distance to buildings, terrain, wind direction and velocity, and use of a vent pipe or stack so that a flammable mixture will not reach a point of ignition. A vent pipe or stack shall have the open end suitably protected to prevent entrance of rain, snow, and solid material. Provision shall be made in vertical vent pipes and stacks for drainage. Prior to and during venting of the CNG cylinders, they shall be properly grounded so as to eliminate any possible static electrical charges.

The provisions of this §13.143 adopted to be effective June 1, 1994, 19 TexReg 3170.

SUBCHAPTER F. RESIDENTIAL FUELING FACILITIES

§13.181. Applicability.

(a) This subchapter applies to the design, construction, installation, and operation of a residential fueling facility as defined in §13.2 of this title (relating to Definitions).

(b) The provisions of this subchapter shall apply to all residential refueling installations.

The provisions of this §13.181 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.182. Scope.

(a) A residential fueling facility is an assembly used for the compression and delivery of natural gas into vehicles with its associated equipment and piping.

(b) The capacity of a residential fueling facility shall not exceed five standard cubic feet per minute (SCFM) of natural gas. Storage of compressed natural gas, except in the vehicle fuel supply cylinder, is prohibited.

The provisions of this §13.182 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.183. System Component Qualifications. System components shall comply with the appropriate provisions in Subchapter B of this chapter (relating to General Rules for Compressed Natural Gas (CNG) Equipment Qualifications).

The provisions of this §13.183 adopted to be effective November 15, 1990, 15 TexReg 5948; amended to be effective June 5, 2006, 31 TexReg 4604.

§13.184. General.

(a) All equipment related to a residential fueling facility installation shall be suitably packaged and located to protect it from physical damage and vandalism. This requirement may be met by enclosing the compressor package in an enclosure, similar to a central air conditioner.

(b) All equipment related to a residential fueling facility installation shall be designed for the pressure, temperature, and service expected.

(c) Vehicles shall be considered as unclassified electrically with respect to Article 500 of the National Electrical Code (NEC).

The provisions of this §13.184 adopted to be effective November 15, 1990, 15 TexReg 5948; amended to be effective June 1, 1994, 19 TexReg 3171.

§13.185. Installation.

(a) All such residential refueling installations shall be installed in accordance with the rules in this chapter.

(b) The primary concern for the location of the refueling system shall be based solely upon its safety. CNG compression and dispensing may be located and conducted outdoors or indoors.

(1) If the compression unit and refueling connections are installed indoors, the following requirements must be met:

(A) the compression unit shall be mounted or otherwise located so that the unit is vented outdoors;

(B) where the CNG residential refueling equipment or the vehicle being fueled is located indoors, a gas detector set to operate at one-fifth the lower flammability limit (LFL) of natural gas shall be installed in the room; and

(C) the gas detector shall be located within six inches (150 mm) of the ceiling or the highest point in the room, and shall stop the compressor and operate an audible or visual alarm if the LFL is exceeded.

(2) CNG residential fueling equipment that is listed may utilize a combination of ventilation or gas detection to ensure that the room is maintained at a level below one-fifth of the LFL of natural gas, as detected by the gas detector described in paragraph (1)(C) of this subsection.

(c) All residential fueling facility equipment shall be installed in accordance with the equipment manufacturer's instructions.

(d) The residential fueling facility shall have a nameplate marked with minimum and maximum gas inlet pressure and flow rate, gas outlet maximum pressure, and electrical requirements.

The provisions of this §13.185 adopted to be effective November 15, 1990, 15 TexReg 5948; amended to be effective December 24, 2012, 37 TexReg 9920.

§13.186. Outdoor Installations. The residential fueling facility shall be installed on a firm noncombustible support to prevent undue stress on piping and conduit.

The provisions of this §13.186 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.187. Installation of Pressure Relief Valves. Pressure relief valves shall be vented upwards to a safe area so as not to impinge on buildings, other equipment, or areas that could be occupied by the public (e.g., sidewalks). The discharge vent line shall be able to withstand the pressure from the relief vapor discharge when the relief valve is in the full open position and shall permit sufficient pressure relief relieving capacity. A spring loaded or counterbalanced

rain cap shall be provided on the discharge vent line. The rain cap shall permit the pressure relief valve to operate at sufficient relieving capacity.

The provisions of this §13.187 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.188. Installation of Pressure Gauges. For measurement and test purposes, pressure gauges may be installed, but are not required.

The provisions of this §13.188 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.189. Pressure Regulation. A residential fueling facility shall be equipped to automatically stop fuel flow when container(s) reach temperature corrected fill pressure.

The provisions of this §13.189 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.190. Piping and Hose.

(a) All piping and hose from the outlet of the compressor shall be supplied as part of the residential fueling facility.

(b) The use of hose in an installation is limited to:

(1) a vehicle refueling hose; the maximum length fueling hose is 12 feet and shall be supported;

(2) an inlet connection to compression equipment not exceeding 36 inches. This connector, if used, shall be supplied as part of the residential fueling facility;

(3) a section of metallic hose not exceeding 36 inches in length in a pipeline to provide flexibility where necessary. Each section shall be so installed that it will be protected against mechanical damage and be readily visible for inspection. The manufacturer's identification shall be retained in each section;

(4) hose used for pressure relief device channels may exceed 36 inches.

(c) The least possible number of connections shall be used in order to reduce the possibility of leakage in the residential fueling facility.

(d) Bleed connections shall be provided in transfer systems to permit depressurizing the line before disconnection. These bleed connections shall be vented to a safe point of discharge.

The provisions of this §13.190 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.191. Testing. All piping and tubing shall be tested after assembly to prove free from leaks at a pressure equal to the maximum working pressure of that portion of the system.

The provisions of this §13.191 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.192. Installation of Emergency Shutdown Equipment.

(a) A residential fueling facility shall be equipped with emergency manual shutdown of the gas supply and electrical power. The emergency electrical switch shall be at least five feet from the residential fueling facility and in view of the residential fueling facility.

(b) Break-away protection shall be provided in a manner such that, in the event of a pull-away, natural gas will cease to flow at any separation.

The provisions of this §13.192 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.193. Operation.

(a) A residential fueling facility shall be operated in accordance with the manufacturer's instructions.

(b) A fuel supply cylinder shall not be charged in excess of its maximum allowable working pressure at normal temperature. Department of Transportation (DOT) cylinders shall be charged in accordance with DOT regulations.

(c) When compressed natural gas is being transferred to a motor vehicle, the engine shall be stopped.

The provisions of this §13.193 adopted to be effective November 15, 1990, 15 TexReg 5948.

§13.194. Maintenance and Inspection.

(a) All residential fueling facility equipment shall be inspected and maintained in accordance with the manufacturer's instructions.

(b) All hoses shall be maintained in operating condition at all times.

(c) All safety relief valves shall be maintained in proper operating condition, in accordance with manufacturer's recommendation.

The provisions of this §13.194 adopted to be effective November 15, 1990, 15 TexReg 5948.